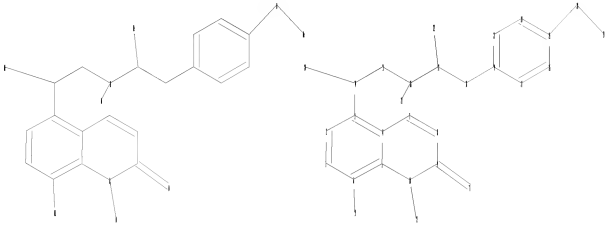
Connecting via Winsock to STN

```
 * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 10:55:17 ON 08 MAR 2010

=>
=> file reg

=>
Uploading C:\Program Files\Stnexp\Queries\10593571.str
```

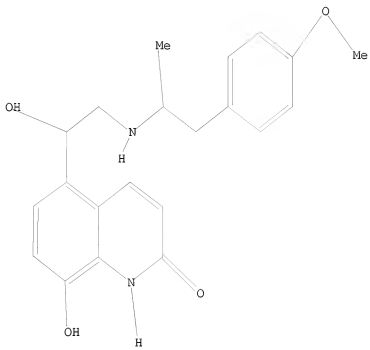


```
chain nodes :
11  12  13  14  15  16  17  18  20  21  22  28  29
ring nodes :
1  2  3  4  5  6  7  8  9  10  19  23  24  25  26  27
chain bonds :
3-14  6-13  9-11  10-12  14-15  14-20  15-16  16-17  16-21  17-18  17-22  18-19
25-28  28-29
ring bonds :
1-2  1-6  2-3  3-4  4-5  4-7  5-6  5-10  7-8  8-9  9-10  19-23  19-27  23-24  24-25
 25-26  26-27
exact/norm bonds :
4-7  5-10  6-13  7-8  8-9  9-10  9-11  14-20  15-16  16-17  25-28
exact bonds :
3-14  10-12  14-15  16-21  17-18  17-22  18-19  28-29
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  19-23  19-27  23-24  24-25  25-26  26-27


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:CLASS  12:CLASS  13:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS  18:CLASS
19:Atom  20:CLASS  21:CLASS  22:CLASS  23:Atom  24:Atom  25:Atom  26:Atom  27:Atom
28:CLASS  29:CLASS
```

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sam
SAMPLE SEARCH INITIATED 10:55:44 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 250 TO ITERATE

100.0% PROCESSED 250 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 4052 TO 5948
PROJECTED ANSWERS: 4 TO 200

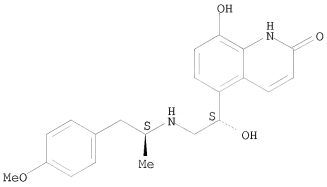
L2 4 SEA SSS SAM L1

=> d scan

L2 4 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-

methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrobromide (1:?), rel-
MF C21 H24 N2 O4 . x Br H

Relative stereochemistry.



●x HBr

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

```
=> s l1 full
FULL SEARCH INITIATED 10:55:50 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     4656 TO ITERATE

100.0% PROCESSED     4656 ITERATIONS                              39 ANSWERS
SEARCH TIME: 00.00.01

L3           39 SEA SSS FUL L1

=> s l3 and HCL
          4731 HCL
L4           0 L3 AND HCL

=> s l3 and salt
        855210 SALT
L5           9 L3 AND SALT

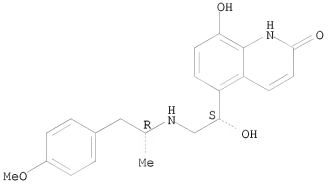
=> d l3 1-39

L3   ANSWER 1 OF 39  REGISTRY  COPYRIGHT 2010 ACS on STN
RN   1174682-49-5  REGISTRY
ED   Entered STN:  19 Aug 2009
CN   2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1R)-2-(4-
     methoxyphenyl)-1-methylethyl]amino]ethyl]-, compd. with
     (αS)-α-methyl-2-naphthalenemethanamine, hydrochloride (2:4:1)
     (CA INDEX NAME)
FS   STEREOSEARCH
MF   C21 H24 N2 O4 . 2 C12 H13 N . Cl H
SR   CA
LC   STN Files:   CA, CAPLUS
```

CM 1

CRN 1052689-14-1
CMF C21 H24 N2 O4

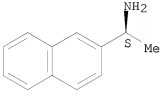
Absolute stereochemistry.



CM 2

CRN 3082-62-0
CMF C12 H13 N

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

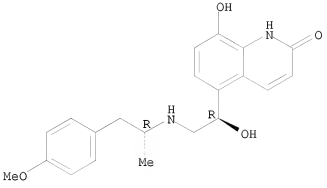
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 1174682-48-4 REGISTRY
ED Entered STN: 19 Aug 2009
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, compd. with (αS)-α-methyl-2-naphthalenemethanamine, hydrochloride (1:2:1) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4 . 2 C12 H13 N . Cl H
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 147568-66-9
CMF C21 H24 N2 O4

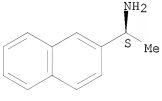
Absolute stereochemistry.



CM 2

CRN 3082-62-0
CMF C12 H13 N

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

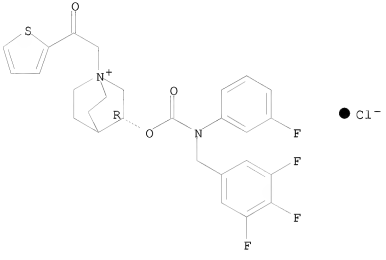
L3 ANSWER 3 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 1172579-37-1 REGISTRY
ED Entered STN: 04 Aug 2009
CN 1-Azoniabicyclo[2.2.2]octane, 3-[[[(3-fluorophenyl)[(3,4,5-trifluorophenyl)methyl]amino]carbonyl]oxy]-1-[2-oxo-2-(2-thienyl)ethyl]-, chloride (1:1), (3R)-, mixt. with 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H25 F4 N2 O3 S . C21 H24 N2 O4 . Cl
CI MXS

SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 1004312-95-1 (1004360-26-2)
CMF C27 H25 F4 N2 O3 S . Cl

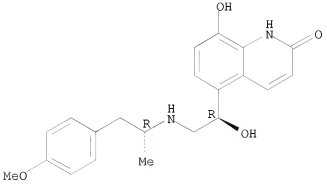
Absolute stereochemistry.



CM 2

CRN 147568-66-9
CMF C21 H24 N2 O4

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

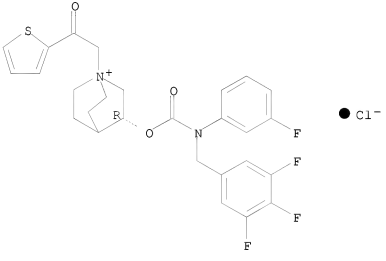
L3 ANSWER 4 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN

RN 1172579-36-0 REGISTRY
ED Entered STN: 04 Aug 2009
CN 1-Azoniabicyclo[2.2.2]octane, 3-[[[(3-fluorophenyl)[(3,4,5-trifluorophenyl)methyl]amino]carbonyl]oxy]-1-[2-oxo-2-(2-thienyl)ethyl]-, chloride (1:1), (3R)-, mixt. with 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone hydrochloride (1:1) (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H25 F4 N2 O3 S . C21 H24 N2 O4 . Cl H . Cl
CI MXS
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 1004312-95-1 (1004360-26-2)
CMF C27 H25 F4 N2 O3 S . Cl

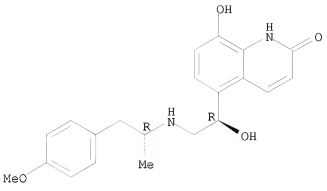
Absolute stereochemistry.



CM 2

CRN 137888-11-0 (147568-66-9)
CMF C21 H24 N2 O4 . Cl H

Absolute stereochemistry.

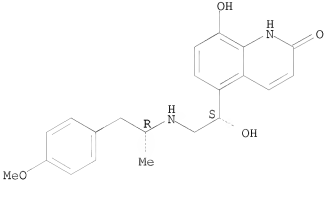


● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 5 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 1052689-17-4 REGISTRY
ED Entered STN: 25 Sep 2008
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4 . Cl H
SR CA
LC STN Files: CA, CAPLUS
CRN (1052689-14-1)

Absolute stereochemistry.

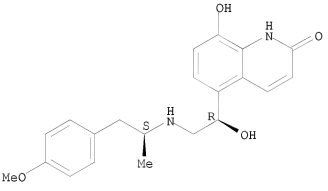


● HCl

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 6 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 1052689-16-3 REGISTRY
ED Entered STN: 25 Sep 2008
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4 . Cl H
SR CA
LC STN Files: CA, CAPLUS
CRN (1052689-13-0)

Absolute stereochemistry.

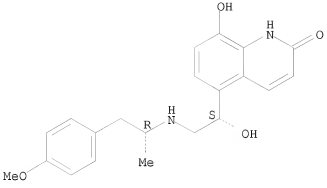


● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 7 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 1052689-14-1 REGISTRY
ED Entered STN: 25 Sep 2008
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4
CI COM
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

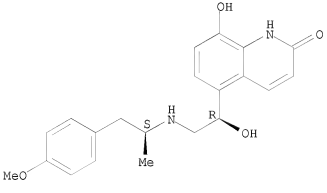


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 8 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 1052689-13-0 REGISTRY
ED Entered STN: 25 Sep 2008
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4
CI COM
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

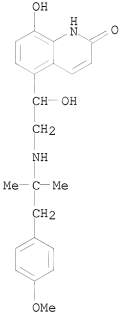


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 9 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN

RN 869868-03-1 REGISTRY
ED Entered STN: 14 Dec 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1,1-dimethylethyl]amino]ethyl]- (CA INDEX NAME)
MF C22 H26 N2 O4
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPAT2, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

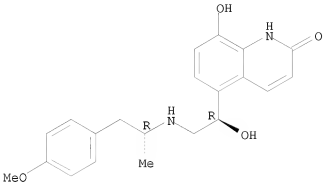
L3 ANSWER 10 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 849110-52-7 REGISTRY
ED Entered STN: 25 Apr 2005
CN Pregna-1,4-diene-3,20-dione, 16,17-[butylidenebis(oxy)]-11,21-dihydroxy-, (11β,16α)-, mixt. with 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H34 O6 . C21 H24 N2 O4 . Cl H
CI MXS
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 137888-11-0 (147568-66-9)

CMF C21 H24 N2 O4 . Cl H

Absolute stereochemistry.

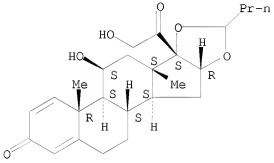


● HCl

CM 2

CRN 51333-22-3
CMF C25 H34 O6

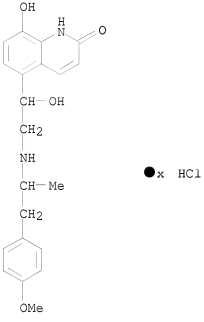
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 11 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-51-9 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:?) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (9CI)
MF C21 H24 N2 O4 . x Cl H
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN (750570-30-0)



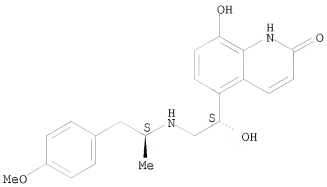
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 12 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-49-5 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, (2Z)-2-butenedioate (salt) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C4 H4 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 734496-04-9
CMF C21 H24 N2 O4

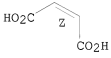
Relative stereochemistry.



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



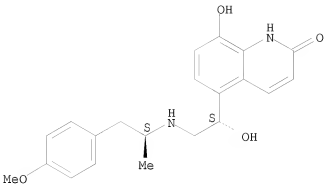
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 13 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-48-4 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2-Propenoic acid, 3-[1,1'-biphenyl]-4-yl-, compd. with 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone (1:?) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Propenoic acid, 3-[1,1'-biphenyl]-4-yl-, compd. with rel-8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C15 H12 O2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

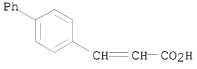
CRN 734496-04-9
CMF C21 H24 N2 O4

Relative stereochemistry.



CM 2

CRN 13026-23-8
CMF C15 H12 O2



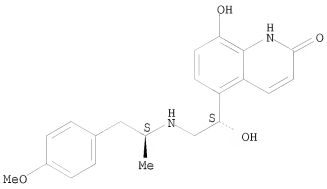
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 14 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-47-3 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2-Naphthalenecarboxylic acid, 1-hydroxy-, compd. with 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone (1:?) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Naphthalenecarboxylic acid, 1-hydroxy-, compd. with rel-8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C11 H8 O3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

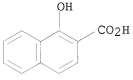
CRN 734496-04-9
CMF C21 H24 N2 O4

Relative stereochemistry.



CM 2

CRN 86-48-6
CMF C11 H8 O3



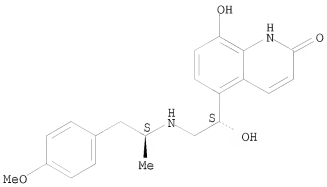
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 15 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-46-2 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, (2R,3R)-2,3-dihydroxybutanedioate (salt) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C4 H6 O6
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 734496-04-9
CMF C21 H24 N2 O4

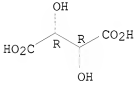
Relative stereochemistry.



CM 2

CRN 87-69-4
CMF C4 H6 O6

Absolute stereochemistry.



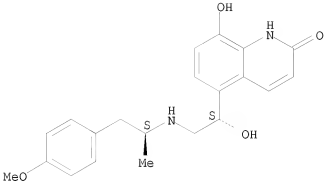
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 16 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-45-1 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, 2-hydroxy-1,2,3-propanetricarboxylate (1:?) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, 2-hydroxy-1,2,3-propanetricarboxylate (salt) (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C6 H8 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

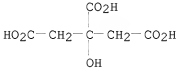
CRN 734496-04-9
CMF C21 H24 N2 O4

Relative stereochemistry.



CM 2

CRN 77-92-9
CMF C6 H8 O7



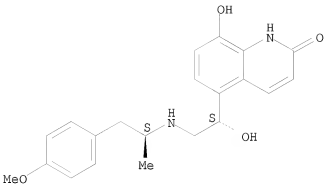
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 17 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-44-0 REGISTRY
ED Entered STN: 04 Mar 2005
CN Propanoic acid, 2-hydroxy-, compd. with 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone (1:?) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propanoic acid, 2-hydroxy-, compd. with rel-8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C3 H6 O3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

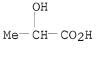
CRN 734496-04-9
CMF C21 H24 N2 O4

Relative stereochemistry.



CM 2

CRN 50-21-5
CMF C3 H6 O3



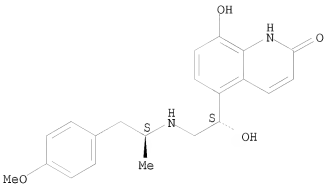
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 18 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-43-9 REGISTRY
ED Entered STN: 04 Mar 2005
CN Butanedioic acid, compd. with 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone (1:?) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, butanedioate (salt) (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C4 H6 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 734496-04-9
CMF C21 H24 N2 O4

Relative stereochemistry.



CM 2

CRN 110-15-6
CMF C4 H6 O4

$HO_2C—CH_2—CH_2—CO_2H$

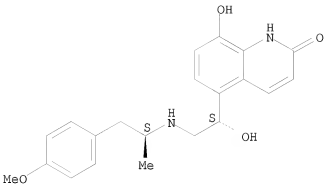
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 19 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-42-8 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, (2E)-2-butenedioate (salt) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C4 H4 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 734496-04-9
CMF C21 H24 N2 O4

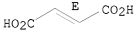
Relative stereochemistry.



CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



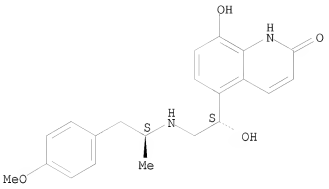
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 20 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-41-7 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, acetate (1:?), rel- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, acetate (salt) (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C2 H4 O2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 734496-04-9
CMF C21 H24 N2 O4

Relative stereochemistry.



CM 2

CRN 64-19-7
CMF C2 H4 O2

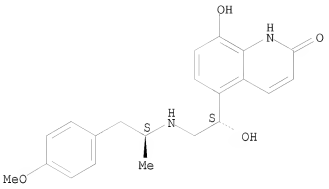
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 21 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-40-6 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, methanesulfonate (1:?) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, methanesulfonate (salt) (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x C H4 O3 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 734496-04-9
CMF C21 H24 N2 O4

Relative stereochemistry.



CM 2

CRN 75-75-2
CMF C H4 O3 S

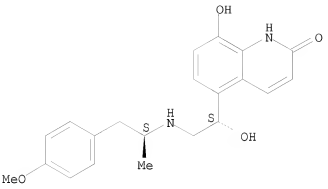
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 22 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-39-3 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, phosphate (salt) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x H3 O4 P
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 734496-04-9
CMF C21 H24 N2 O4

Relative stereochemistry.



CM 2

CRN 7664-38-2
CMF H3 O4 P

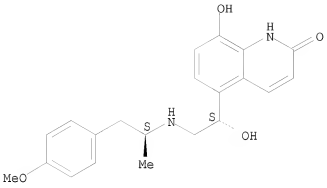
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 23 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-38-2 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, sulfate (1:?) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel-, sulfate (salt) (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x H2 O4 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 734496-04-9
CMF C21 H24 N2 O4

Relative stereochemistry.



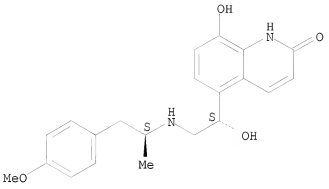
CM 2

CRN 7664-93-9
CMF H2 O4 S

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 24 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-37-1 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrobromide (1:?), rel- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrobromide, rel- (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x Br H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN (734496-04-9)

Relative stereochemistry.

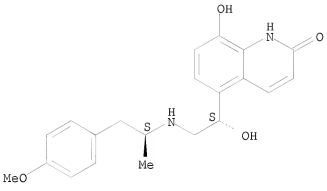


●x HBr

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 25 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 842141-36-0 REGISTRY
ED Entered STN: 04 Mar 2005
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:?), rel- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride, rel- (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x Cl H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN (734496-04-9)

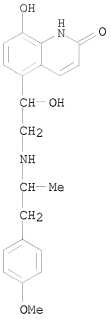
Relative stereochemistry.



●x HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 26 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 750570-30-0 REGISTRY
ED Entered STN: 24 Sep 2004
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)
MF C21 H24 N2 O4
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

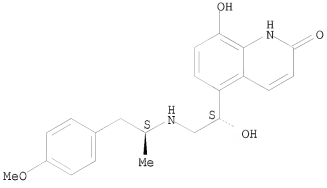


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 27 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 749197-16-8 REGISTRY
ED Entered STN: 22 Sep 2004
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4
CI COM
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

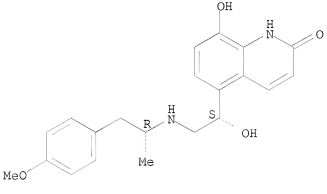


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 28 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 746563-63-3 REGISTRY
ED Entered STN: 17 Sep 2004
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, (R*,S*)- (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4
CI COM
SR CA

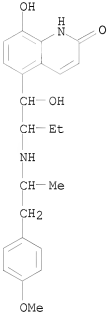
Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 ANSWER 29 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN

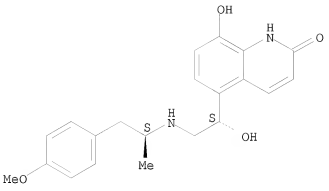
RN 735215-12-0 REGISTRY
ED Entered STN: 29 Aug 2004
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]butyl]- (CA INDEX NAME)
MF C23 H28 N2 O4
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 ANSWER 30 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 734496-04-9 REGISTRY
ED Entered STN: 27 Aug 2004
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel- (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

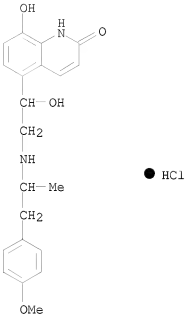
Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

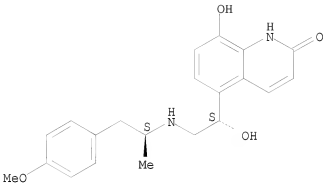
L3 ANSWER 31 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 676437-71-1 REGISTRY
ED Entered STN: 22 Apr 2004
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, monohydrochloride (9CI)
MF C21 H24 N2 O4 . Cl H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN (750570-30-0)



2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 32 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 300550-52-1 REGISTRY
ED Entered STN: 31 Oct 2000
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, monohydrochloride (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . Cl H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
CRN (749197-16-8)

Absolute stereochemistry.

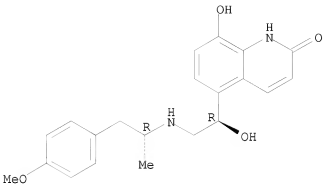


● HCl

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 33 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 147568-66-9 REGISTRY
ED Entered STN: 14 May 1993
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, [R-(R*,R*)]-
OTHER NAMES:
CN Carmoterol
CN CHF 4226
FS STEREOSEARCH
MF C21 H24 N2 O4
CI COM
SR CA
LC STN Files: ADISINSIGHT, CA, CAPLUS, CHEMCATS, IMSDRUGNEWS, IMSRESEARCH, IPA, MEDLINE, PROUSDDR, TOXCENTER, USAN, USPAT2, USPATFULL

Absolute stereochemistry.

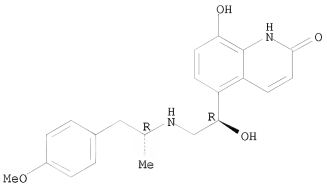


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

37 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
37 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 34 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 137888-11-0 REGISTRY
ED Entered STN: 13 Dec 1991
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, monohydrochloride (9CI)
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, monohydrochloride, [R-(R*,R*)]-
OTHER NAMES:
CN (R,R)-Carmoterol hydrochloride
CN Carmoterol hydrochloride
CN CHF 4226.01
CN TA 2005
FS STEREOSEARCH
MF C21 H24 N2 O4 . Cl H
CI COM
SR CA
LC STN Files: ADISINSIGHT, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CHEMCATS, EMBASE, IMSRESEARCH, PROMT, TOXCENTER, USPAT2, USPATFULL
CRN (147568-66-9)

Absolute stereochemistry.

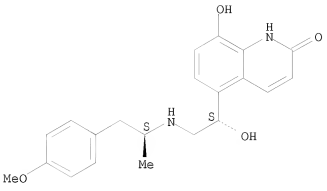


● HCl

64 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
64 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 35 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 100429-09-2 REGISTRY
ED Entered STN: 22 Feb 1986
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride, [S-(R*,R*)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x Cl H
SR CA
LC STN Files: CA, CAPLUS, PROUSDDR, SYNTHLINE, USPATFULL
CRN (749197-16-8)

Absolute stereochemistry.

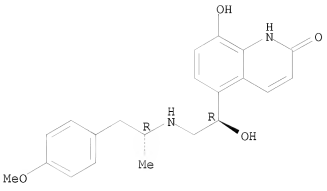


●x HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 36 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 100429-08-1 REGISTRY
ED Entered STN: 22 Feb 1986
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride, [R-(R*,R*)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H24 N2 O4 . x Cl H
SR CA
LC STN Files: ADISINSIGHT, CA, CAPLUS, IMSRESEARCH, PROUSDDR, RTECS*, SYNTHLINE, USPATFULL
(*File contains numerically searchable property data)
CRN (147568-66-9)

Absolute stereochemistry.

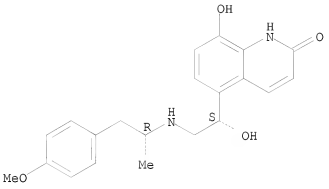


●x HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 37 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 100331-98-4 REGISTRY
ED Entered STN: 15 Feb 1986
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:2), rel- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, dihydrochloride, (R*,S*)-(±)-
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, dihydrochloride, (R*,S*)- (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . 2 Cl H
SR CA
LC STN Files: CA, CAPLUS, PROUSDDR, SYNTHLINE, USPATFULL
CRN (746563-63-3)

Relative stereochemistry.

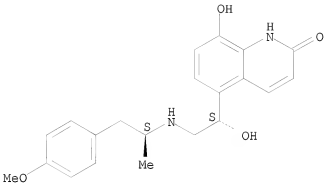


●2 HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 38 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 100331-97-3 REGISTRY
ED Entered STN: 15 Feb 1986
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:2), rel- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, dihydrochloride, (R*,R*)-(±)-
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, dihydrochloride, (R*,R*)- (9CI)
FS STEREOSEARCH
MF C21 H24 N2 O4 . 2 Cl H
SR CA
LC STN Files: CA, CAPLUS, PROUSDDR, SYNTHLINE, USPATFULL
CRN (734496-04-9)

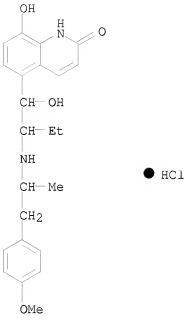
Relative stereochemistry.



●2 HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 39 OF 39 REGISTRY COPYRIGHT 2010 ACS on STN
RN 64749-99-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]butyl]-, hydrochloride (1:1) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]butyl]-, monohydrochloride (9CI)
MF C23 H28 N2 O4 . Cl H
LC STN Files: CA, CAPLUS
CRN (735215-12-0)



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> file ca

=> d his

     (FILE 'HOME' ENTERED AT 10:55:17 ON 08 MAR 2010)

     FILE 'REGISTRY' ENTERED AT 10:55:27 ON 08 MAR 2010
L1             STRUCTURE UPLOADED
L2               4 S L1 SAM
L3              39 S L1 FULL
L4               0 S L3 AND HCL
L5               9 S L3 AND SALT

     FILE 'CA' ENTERED AT 10:58:17 ON 08 MAR 2010

=> s l3
L6            90 L3

=> s l6 and crystal?
       2054478 CRYSTAL?
L7            11 L6 AND CRYSTAL?

=> d 1-11 ibib abs fhitstr

L7   ANSWER 1 OF 11  CA  COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:        152:177114  CA
TITLE:                   Process for improving materials crystallinity
                         using ultrasound
```

INVENTOR(S): Ruecroft, Graham; Parikh, Dipesh; Hipkiss, David
PATENT ASSIGNEE(S): Prosonix Limited, UK
SOURCE: PCT Int. Appl., 82pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2010007447	A1	20100121	WO 2009-GB50885	20090720

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

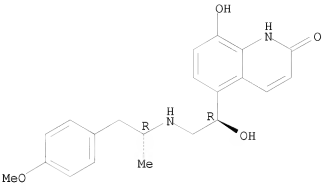
PRIORITY APPLN. INFO.:
GB 2008-13114 A 20080718
GB 2009-6144 A 20090409
GB 2009-9486 A 20090603

AB This invention provides a process for increasing the crystallinity of at least one solid material which is less than 100% crystalline, comprising contacting said solid material with solvent in which the solid material is insol. or poorly soluble (a non-solvent); and applying ultrasound to the solid material when in contact with the non-solvent.

IT 147568-66-9
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(crystallinity of solid materials that are part of pharmaceutical composition improved using ultrasound and solvents where solid material is)

RN 147568-66-9 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 152:177113 CA
TITLE: Process for improving crystallinity of fluticasone particles
INVENTOR(S): Ruecroft, Graham; Parikh, Dipesh; Hipkiss, David
PATENT ASSIGNEE(S): Prosonix Limited, UK
SOURCE: PCT Int. Appl., 73pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2010007446	A1	20100121	WO 2009-GB50884	20090720

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

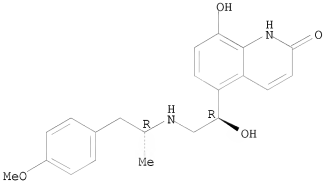
PRIORITY APPLN. INFO.:		
GB 2008-13114	A	20080718
GB 2009-6144	A	20090409
GB 2009-9486	A	20090603

AB This invention provides a process for increasing the crystallinity of at least one solid material comprising a fluticasone compound which is less than 100% crystalline, comprising contacting said solid material with solvent in which the solid material is insol. or poorly soluble (a non-solvent); and applying ultrasound to the solid material when in contact with the non-solvent.

IT 137888-11-0, Carmoterol hydrochloride

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(crystallinity of solid materials improved using ultrasound and solvents where solid materials are part of pharmaceutical composition with)
RN 137888-11-0 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 151:515138 CA
TITLE: Polymorph of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride for medicaments
INVENTOR(S): Pivetti, Fausto; Lutero, Emilio
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: PCT Int. Appl., 23pp.; Chemical Indexing Equivalent to 151:515134 (EP)
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009135579	A1	20091112	WO 2009-EP2549	20090407

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,

PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
EP 2116537 A1 20091111 EP 2008-155799 20080507
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS
PRIORITY APPLN. INFO.: EP 2008-155799 A 20080507

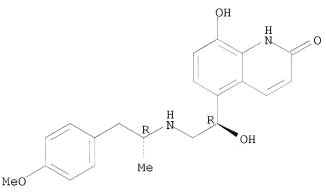
AB The present invention relates to a novel polymorphic crystal form of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]-amino]ethyl]-2(1H)-quinolinone monohydrochloride (CHF 4226). The invention also relates to processes for its preparation, pharmaceutical compns. thereof, and to its use as a medicament. CHF 4226 crystal form D was crystallized from acetonitrile. An inhalable dry powder formulation is presented.

IT 147568-66-9P, CHF 4226
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal form D; polymorph of CHF 4226, and its preparation and use for medicaments)

RN 147568-66-9 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 151:515137 CA
TITLE: Polymorph of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride for medicaments
INVENTOR(S): Pivetti, Fausto; Lutero, Emilio
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: PCT Int. Appl., 26pp.; Chemical Indexing Equivalent to

151:515135 (EP)
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009135577	A1	20091112	WO 2009-EP2514	20090406
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 2116536	A1	20091111	EP 2008-155802	20080507
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS				

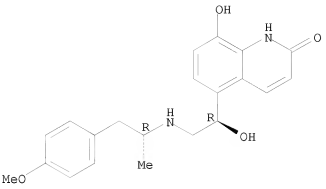
PRIORITY APPLN. INFO.: EP 2008-155802 A 20080507

AB The present invention relates to a novel polymorphic crystal form of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]-amino]ethyl]-2(1H)-quinolinone monohydrochloride (CHF 4226). The invention also relates to processes for its preparation, pharmaceutical compns. thereof, and to its use as a medicament. CHF 4226 crystal form E was crystallized from acetonitrile and water. An inhalable dry powder formulation is presented.

IT 147568-66-9P, CHF 4226
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal form E; polymorph of CHF 4226, and its preparation and use for medicaments)

RN 147568-66-9 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 151:515135 CA
TITLE: Polymorph of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride for medicaments
INVENTOR(S): Pivetti, Fausto; Lutero, Emilio
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: Eur. Pat. Appl., 18pp.; Chemical Indexing Equivalent to 151:515137 (WO)
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 2116536	A1	20091111	EP 2008-155802	20080507
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS				
WO 2009135577	A1	20091112	WO 2009-EP2514	20090406
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20090280067	A1	20091112	US 2009-436322	20090506

PRIORITY APPLN. INFO.: EP 2008-155802 A 20080507
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The present invention relates to a novel polymorphic crystal

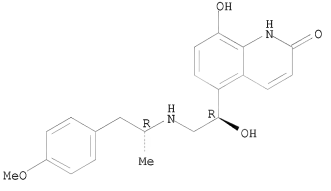
form of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]-amino]ethyl]-2(1H)-quinolinone monohydrochloride (CHF 4226). The invention also relates to processes for its preparation, pharmaceutical compns. thereof, and to its use as a medicament. CHF 4226 crystal form E was crystallized from acetonitrile and water. An inhalable dry powder formulation is presented.

IT 147568-66-9P, CHF 4226
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal form E; polymorph of CHF 4226, and its preparation and use for medicaments)

RN 147568-66-9 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



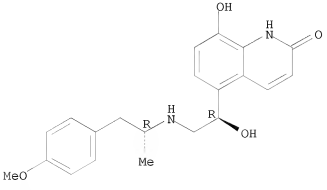
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 151:515134 CA
TITLE: Polymorph of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride for medicaments
INVENTOR(S): Pivetti, Fausto; Lutero, Emilio
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: Eur. Pat. Appl., 15pp.; Chemical Indexing Equivalent to 151:515138 (WO)
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 2116537	A1	20091111	EP 2008-155799	20080507
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS				

WO 2009135579 A1 20091112 WO 2009-EP2549 20090407
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
US 20090280068 A1 20091112 US 2009-436368 20090506
PRIORITY APPLN. INFO.: EP 2008-155799 A 20080507
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The present invention relates to a novel polymorphic crystal form of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]-amino]ethyl]-2(1H)-quinolinone monohydrochloride (CHF 4226). The invention also relates to processes for its preparation, pharmaceutical compns. thereof, and to its use as a medicament. CHF 4226 crystal form D was crystallized from acetonitrile. An inhalable dry powder formulation is presented.
IT 147568-66-9P, CHF 4226
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal form D; polymorph of CHF 4226, and its preparation and use for medicaments)
RN 147568-66-9 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 151:329036 CA
TITLE: Analysis of full and partial agonists binding to β2-adrenergic receptor suggests a role of

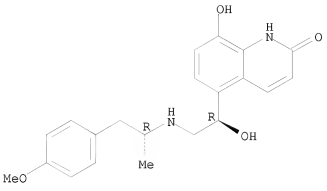
transmembrane helix V in agonist-specific conformational changes
AUTHOR(S): Katritch, Vsevolod; Reynolds, Kimberly A.; Cherezov, Vadim; Hanson, Michael A.; Roth, Christopher B.; Yeager, Mark; Abagyan, Ruben
CORPORATE SOURCE: Department of Molecular Biology, The Scripps Research Institute, La Jolla, CA, 92037, USA
SOURCE: Journal of Molecular Recognition (2009), 22(4), 307-318
CODEN: JMORE4; ISSN: 0952-3499
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The 2.4 Å crystal structure of the β2-adrenergic receptor (β2AR) in complex with the high-affinity inverse agonist (-)-carazolol provides a detailed structural framework for the anal. of ligand recognition by adrenergic receptors. Insights into agonist binding and the corresponding conformational changes triggering G-protein coupled receptor (GPCR) activation mechanism are of special interest. While the carazolol pocket captured in the β2AR crystal structure accommodates (-)-isoproterenol and other agonists without steric clashes, a finite movement of the flexible extracellular part of TM-V helix (TM-Ve) obtained by receptor optimization in the presence of docked ligand can further improve the calculated binding affinities for agonist compds. Tilting of TM-Ve towards the receptor axis provides a more complete description of polar receptor-ligand interactions for full and partial agonists, by enabling optimal engagement of agonists with two exptl. identified anchor sites, formed by Asp 113/Asn 312 and Ser 203/Ser 204/Ser 207 side chains. Further, receptor models incorporating a flexible TM-V backbone allow reliable prediction of binding affinities for a set of diverse ligands, suggesting potential utility of this approach to design of effective and subtype-specific agonists for adrenergic receptors. Systematic differences in capacity of partial, full and inverse agonists to induce TM-V helix tilt in the β2AR model suggest potential role of TM-V as a conformational "rheostat" involved in the whole spectrum of β2AR responses to small mol. signals.

IT 137888-11-0, TA-2005
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(anal. of full and partial agonists binding to β2-adrenergic receptor suggests role of transmembrane helix V in agonist-specific conformational changes)

RN 137888-11-0 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 143:332556 CA
TITLE: Preparation of 8-hydroxy-5-[(-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino][ethyl]-2(1H)-quinolinone monohydrochloride in crystalline form
INVENTOR(S): Pivetti, Fausto; Pighi, Roberto
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005089760	A1	20050929	WO 2005-EP3144	20050324
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005224032	A1	20050929	AU 2005-224032	20050324
CA 2560650	A1	20050929	CA 2005-2560650	20050324
EP 1729773	A1	20061213	EP 2005-730069	20050324

EP 1729773		B1	20080702				
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU							
CN 1929840		A	20070314	CN 2005-80007638			20050324
BR 2005008213		A	20070717	BR 2005-8213			20050324
JP 2007530489		T	20071101	JP 2007-504359			20050324
AT 399552		T	20080715	AT 2005-730069			20050324
ES 2309739		T3	20081216	ES 2005-730069			20050324
KR 2007001946		A	20070104	KR 2006-715966			20060808
MX 2006010515		A	20070330	MX 2006-10515			20060914
IN 2006DN05463		A	20070803	IN 2006-DN5463			20060920
NO 2006004274		A	20061013	NO 2006-4274			20060921
US 20070197586		A1	20070823	US 2007-593571			20070111
PRIORITY APPLN. INFO.:				EP 2004-7045		A	20040324
				WO 2005-EP3144		W	20050324

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

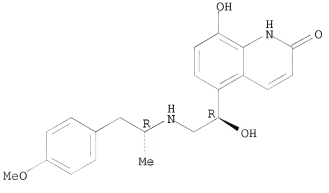
AB The invention relates to 8-hydroxy-5-[(1R)-1-hydroxy-2[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride (TA 2005) (I)in crystalline form, provided with suitable characteristics in order to be used for the preparation of pharmaceutical compns. for inhalation in combination with suitable carriers or vehicles and the process for its preparation I was dissolved in EtOH-water mixture and crystallized by adding diisopropyl ether.

IT 137888-11-0, TA 2005
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of hydroxymethoxyphenylmethylethyl)aminoethylquinolinone in crystalline form)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

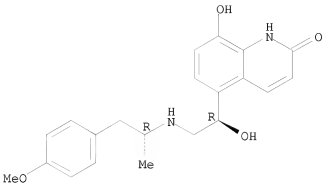
L7 ANSWER 9 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 140:12981 CA
TITLE: Three-dimensional models for β-adrenergic receptor complexes with agonists and antagonists
AUTHOR(S): Furse, Kristina E.; Lybrand, Terry P.
CORPORATE SOURCE: Department of Chemistry & Center for Structural Biology, Vanderbilt University, Nashville, TN, 37232-8725, USA
SOURCE: Journal of Medicinal Chemistry (2003), 46(21), 4450-4462
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Mol. modeling methods have been used to constructs three-dimensional models for agonist and antagonist complexes with β-adrenergic receptors. The recent rhodopsin crystal structure was used as a template in standard homol. modeling methods. The rhodopsin-based homol. models were assessed for agreement with exptl. results for β-adrenergic receptors, and compared with receptor models developed using de novo modeling techniques. While the de novo and homol.-derived receptor models are generally quite similar, there are some localized structural differences that impact the putative ligand-binding site significantly. The de novo receptor models appear to provide much better agreement with exptl. data, particularly for receptor models appear to provide much better agreement with exptl. data, particularly for receptor complexes with agonist ligands. The de novo receptor models also yield some interesting and testable hypotheses for the structural basis of β-adrenergic receptor subtype ligand selectivity.

IT 137888-11-0, TA-2005
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(three-dimensional models for β-adrenergic receptor complexes with agonists and antagonists)

RN 137888-11-0 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 42 THERE ARE 42 CAPLUS RECORDS THAT CITE THIS RECORD (42 CITINGS)
REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 135:231701 CA
TITLE: Formulation for inhalation and the treatment of respiratory disorders
INVENTOR(S): Trofast, Jan
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.
SOURCE: U.S., 4 pp., Cont.-in-part of U.S. 6,030,604. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6287540	B1	20010911	US 1999-431916	19991102
US 6030604	A	20000229	US 1998-4902	19980109
IN 2000DE00744	A	20070309	IN 2000-DE744	20000821
PRIORITY APPLN. INFO.:			SE 1997-135	A 19970120
			US 1998-4902	A2 19980109
			US 1994-316938	A2 19941003
			IN 1998-DE48	A3 19980109

AB A dry powder composition comprising one more potent pharmaceutically active substances and a carrier substance, all of which are in finely divided form, wherein the formulation has a poured bulk d. of from 0.28 to 0.38 g/mL is useful in the treatment of respiratory disorders. Thus, 0.0315 parts of formoterol flimarate dihydrate and 2.969 parts of lactose monohydrate were mixed and micronized to obtain a particle size of less than 3 μm. The micronized particles were then treated to remove amorphous regions in their crystal structure. The powder was then agglomerated, sieving in an oscillating sieve (0.5 mm mesh size), spheronizing in a rotating pan with a peripheral speed of 0.5 m/s for 4

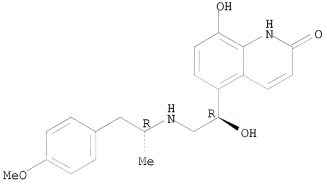
min and then sieving again using the same sieve, then spheronizing once more for 6 min before final sieving (mesh size 1.0 mm) giving a powder with a bulk d. of 0.32 g/mL.

IT 137888-11-0, TA 2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(formulation for inhalation and treatment of respiratory disorders)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 11 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 129:265477 CA
ORIGINAL REFERENCE NO.: 129:54017a,54020a
TITLE: Preparation of powder agglomerates of drugs and solid binders
INVENTOR(S): Yang, Tsong-toh
PATENT ASSIGNEE(S): Schering Corp., USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9841193	A1	19980924	WO 1998-US3799	19980316
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ,				

VN, YU
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

CA 2282360	A1	19980924	CA 1998-2282360		19980316
CA 2282360	C	20041109			
CA 2481868	A1	19980924	CA 1998-2481868		19980316
AU 9865378	A	19981012	AU 1998-65378		19980316
AU 741783	B2	20011206			
EP 969816	A1	20000112	EP 1998-911423		19980316
EP 969816	B1	20041215			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, LT, LV, FI, RO					
JP 2000510478	T	20000815	JP 1998-540530		19980316
JP 3901738	B2	20070404			
HU 2000002029	A2	20001128	HU 2000-2029		19980316
HU 2000002029	A3	20010228			
HU 226671	B1	20090629			
NZ 337443	A	20010427	NZ 1998-337443		19980316
EP 1393721	A1	20040303	EP 2003-20466		19980316
EP 1393721	B1	20081126			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, LT, LV, FI, RO					
CN 1149076	C	20040512	CN 1998-805280		19980316
CN 1552310	A	20041208	CN 2004-10032204		19980316
CN 100518718	C	20090729			
AT 284677	T	20050115	AT 1998-911423		19980316
PT 969816	E	20050429	PT 1998-911423		19980316
ES 2234102	T3	20050616	ES 1998-911423		19980316
CZ 295460	B6	20050817	CZ 1999-3233		19980316
SK 284919	B6	20060202	SK 1999-1280		19980316
PL 192441	B1	20061031	PL 1998-335742		19980316
AT 415149	T	20081215	AT 2003-20466		19980316
PT 1393721	E	20090202	PT 2003-20466		19980316
EP 2036544	A1	20090318	EP 2008-20312		19980316
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, AL, LT, LV, MK, RO, SI					
ES 2316681	T3	20090416	ES 2003-20466		19980316
ZA 9802254	A	19980917	ZA 1998-2254		19980317
TW 221778	B	20041011	TW 1998-87103951		19980317
IN 1998MA00552	A	20050304	IN 1998-MA552		19980317
NO 9904519	A	19991119	NO 1999-4519		19990917
NO 328062	B1	20091113			
HK 1021323	A1	20050603	HK 2000-100233		20000114
HK 1061359	A1	20090306	HK 2004-103111		20000114
JP 2006152000	A	20060615	JP 2006-60355		20060306

PRIORITY APPLN. INFO.:

US 1997-821129	A	19970320
CA 1998-2282360	A3	19980316
EP 1998-911423	A3	19980316
EP 2003-20466	A3	19980316
JP 1998-540530	A3	19980316
WO 1998-US3799	W	19980316
HK 2000-100233	A3	20000114

AB A method of producing an agglomerate of drug and solid binder is disclosed. The process involves producing individual agglomerate particles and then converting the convertible amorphous content of same, following agglomeration, by the application of, for example, moisture.

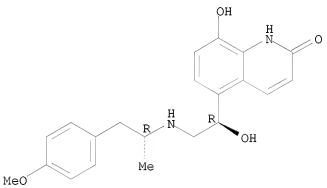
Agglomerates capable of conversion as well as the finished agglomerates and oral and nasal dosing systems including same are also contemplated. The process produces agglomerates which are rugged but which will produce an acceptable fine particle fraction during dosing. Agglomerates of lactose monohydrate (I) and mometasone furoate (II) were prepared under the following conditions: micronization of I and II at 21° and 20% relative humidity (RH), storage of micronized lactose at 21° and 20% RH, conversion of powder agglomerates at 25° and 50% RH. The agglomerates had bulk d. of 0.35 g/cm3, and mean particle size of 580 μm and the ratio of II:I was 1:5.8.

IT 137888-11-0, Ta 2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of powder agglomerates of drugs and solid binders)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

OS.CITING REF COUNT: 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 10:55:17 ON 08 MAR 2010)

FILE 'REGISTRY' ENTERED AT 10:55:27 ON 08 MAR 2010
L1 STRUCTURE UPLOADED
L2 4 S L1 SAM
L3 39 S L1 FULL
L4 0 S L3 AND HCL
L5 9 S L3 AND SALT

FILE 'CA' ENTERED AT 10:58:17 ON 08 MAR 2010

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L6          90 S L3
L7          11 S L6 AND CRYSTAL?

=> s l6 and monohydrochloride
        4269 MONOHYDROCHLORIDE
L8          8 L6 AND MONOHYDROCHLORIDE

=> d ibib abs hitstr 1-8

L8   ANSWER 1 OF 8  CA  COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:        151:515138  CA
TITLE:                   Polymorph of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-
                         methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-
                         quinolinone monohydrochloride for
                         medicaments
INVENTOR(S):             Pivetti, Fausto; Lutero, Emilio
PATENT ASSIGNEE(S):      Chiesi Farmaceutici S.p.A., Italy
SOURCE:                  PCT Int. Appl., 23pp.; Chemical Indexing Equivalent to
                         151:515134 (EP)
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  2
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
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     WO 2009135579        A1    20091112    WO 2009-EP2549          20090407
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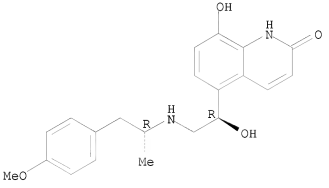
             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
     EP 2116537           A1    20091111    EP 2008-155799          20080507
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI,
             SK, TR, AL, BA, MK, RS
PRIORITY APPLN. INFO.:                       EP 2008-155799      A  20080507
AB   The present invention relates to a novel polymorphic crystal form of
     8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]-
     amino]ethyl]-2(1H)-quinolinone monohydrochloride (CHF 4226).
     The invention also relates to processes for its preparation, pharmaceutical
     compns. thereof, and to its use as a medicament.  CHF 4226 crystal form D
     was crystallized from acetonitrile.  An inhalable dry powder formulation is
     presented.
IT   147568-66-9P, CHF 4226
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (crystal form D; polymorph of CHF 4226, and its preparation and use for
```

medicaments)
RN 147568-66-9 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



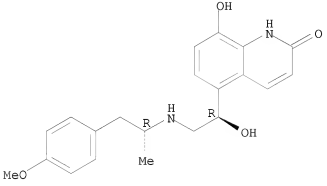
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 8 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 151:515137 CA
TITLE: Polymorph of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride for medicaments
INVENTOR(S): Pivetti, Fausto; Lutero, Emilio
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: PCT Int. Appl., 26pp.; Chemical Indexing Equivalent to 151:515135 (EP)
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009135577	A1	20091112	WO 2009-EP2514	20090406
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 2116536	A1	20091111	EP 2008-155802	20080507

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS
PRIORITY APPLN. INFO.: EP 2008-155802 A 20080507
AB The present invention relates to a novel polymorphic crystal form of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]-amino]ethyl]-2(1H)-quinolinone monohydrochloride (CHF 4226). The invention also relates to processes for its preparation, pharmaceutical compns. thereof, and to its use as a medicament. CHF 4226 crystal form E was crystallized from acetonitrile and water. An inhalable dry powder formulation is presented.
IT 147568-66-9P, CHF 4226
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal form E; polymorph of CHF 4226, and its preparation and use for medicaments)
RN 147568-66-9 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 8 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 151:515135 CA
TITLE: Polymorph of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride for medicaments
INVENTOR(S): Pivetti, Fausto; Lutero, Emilio
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: Eur. Pat. Appl., 18pp.; Chemical Indexing Equivalent to 151:515137 (WO)
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 2116536	A1	20091111	EP 2008-155802	20080507
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS				
WO 2009135577	A1	20091112	WO 2009-EP2514	20090406
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20090280067	A1	20091112	US 2009-436322	20090506

PRIORITY APPLN. INFO.: EP 2008-155802 A 20080507

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

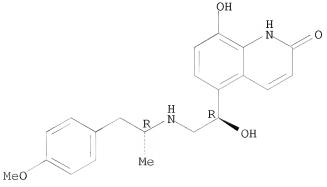
AB The present invention relates to a novel polymorphic crystal form of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]-amino]ethyl]-2(1H)-quinolinone monohydrochloride (CHF 4226). The invention also relates to processes for its preparation, pharmaceutical compns. thereof, and to its use as a medicament. CHF 4226 crystal form E was crystallized from acetonitrile and water. An inhalable dry powder formulation is presented.

IT 147568-66-9P, CHF 4226
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal form E; polymorph of CHF 4226, and its preparation and use for medicaments)

RN 147568-66-9 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

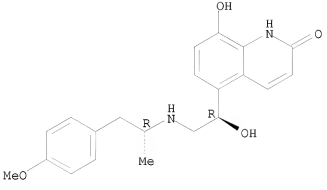
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 8 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 151:515134 CA
TITLE: Polymorph of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride for medicaments
INVENTOR(S): Pivetti, Fausto; Lutero, Emilio
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: Eur. Pat. Appl., 15pp.; Chemical Indexing Equivalent to 151:515138 (WO)
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 2116537	A1	20091111	EP 2008-155799	20080507
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS				
WO 2009135579	A1	20091112	WO 2009-EP2549	20090407
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20090280068	A1	20091112	US 2009-436368	20090506

PRIORITY APPLN. INFO.: EP 2008-155799 A 20080507
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The present invention relates to a novel polymorphic crystal form of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]-amino]ethyl]-2(1H)-quinolinone monohydrochloride (CHF 4226). The invention also relates to processes for its preparation, pharmaceutical compns. thereof, and to its use as a medicament. CHF 4226 crystal form D was crystallized from acetonitrile. An inhalable dry powder formulation is presented.
IT 147568-66-9P, CHF 4226
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal form D; polymorph of CHF 4226, and its preparation and use for medicaments)
RN 147568-66-9 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 8 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 149:224112 CA
TITLE: Process for the preparation of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2-(1H)quinolinone (CHF4226) monohydrochloride via coupling of protected acetylquinolones with chiral phenylpropylamines
INVENTOR(S): Pivetti, Fausto; Bocchi, Monica; Delcanale, Maurizio
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: PCT Int. Appl., 19pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008093188	A1	20080807	WO 2008-IB134	20080122
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1953143	A1	20080806	EP 2007-1950	20070130
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
AU 2008211655	A1	20080807	AU 2008-211655	20080122

CA 2676849	A1	20080807	CA 2008-2676849	20080122
KR 2009104820	A	20091006	KR 2009-714047	20080122
EP 2109603	A1	20091021	EP 2008-702287	20080122
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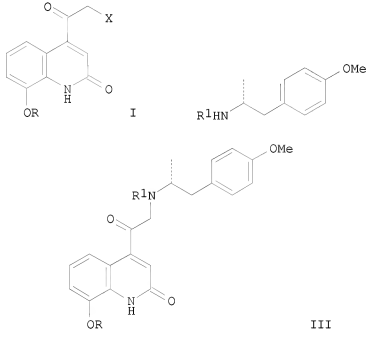
MX 2009007868	A	20090731	MX 2009-7868	20090723
IN 2009KN02762	A	20090911	IN 2009-KN2762	20090729
CN 101611010	A	20091223	CN 2008-80003368	20090729
US 20090326231	A1	20091231	US 2009-512187	20090730
PRIORITY APPLN. INFO.:			EP 2007-1950 A	20070130
			WO 2008-IB134 W	20080122

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 149:224112; MARPAT 149:224112
GI



AB A process for the preparation of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2-(1H)-quinolinone monohydrochloride comprises coupling of acetylquinolones (I; R = protecting group; X = F, Cl, Br, iodo) with phenylpropylamines (II; R1 = protecting group) to give aminoketones (III; R, R1 as above) followed by reduction and deprotection. Thus, 5-(α-bromoacetyl)-8-benzyloxy-2(1H)-quinolinone and (R)-4-methoxy-α-methyl-N-benzylbenzeneethanamine were refluxed overnight with NaHCO3 in CH2Cl2/DMF to give 91% III (R, R1 = PhCH2) as the hydrochloride. The latter in CH2Cl2/MeOH at -60° was treated with NaBH4 followed by stirring for 30 min. and addition of H2O at -10° to give 86% 5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl](phenylmethyl)amino]ethyl]-8-(phenylmethoxy)-2(1H)-quinolinone

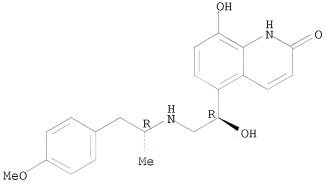
as the hydrochloride. Hydrogenolysis in EtOH/H2O over Pd/C afforded CHF4226 hydrochloride.

IT 137888-11-0P 147568-66-9P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of CHF4226 via coupling of protected acetylquinolones with chiral phenylpropylamines)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

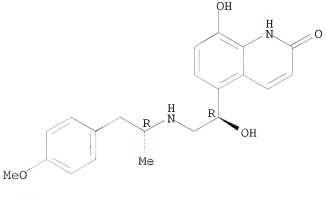


● HCl

RN 147568-66-9 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 8 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 149:224111 CA
TITLE: Process for the preparation of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2-(1H)quinolinone (CHF4226) monohydrochloride via coupling of protected acetylquinolones with chiral phenylpropylamines
INVENTOR(S): Pivetti, Fausto; Bocchi, Monica; Delcanale, Maurizio
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: Eur. Pat. Appl., 13pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1953143	A1	20080806	EP 2007-1950	20070130
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
AU 2008211655	A1	20080807	AU 2008-211655	20080122
CA 2676849	A1	20080807	CA 2008-2676849	20080122
WO 2008093188	A1	20080807	WO 2008-IB134	20080122
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
KR 2009104820	A	20091006	KR 2009-714047	20080122
EP 2109603	A1	20091021	EP 2008-702287	20080122
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS				
MX 2009007868	A	20090731	MX 2009-7868	20090723
IN 2009KN02762	A	20090911	IN 2009-KN2762	20090729
CN 101611010	A	20091223	CN 2008-80003368	20080729
US 20090326231	A1	20091231	US 2009-512187	20090730
PRIORITY APPLN. INFO.:			EP 2007-1950 A	20070130
			WO 2008-IB134 W	20080122

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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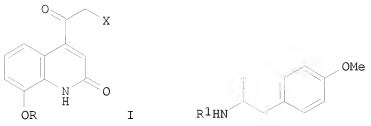
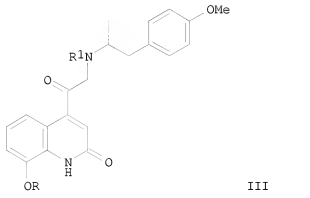


I

II



III

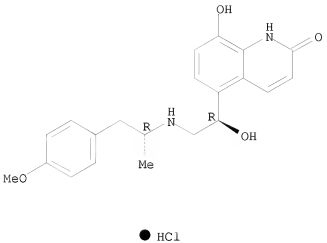
AB A process for the preparation of 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2-(1H)-quinolinone monohydrochloride comprises coupling of acetylquinolones (I; R = protecting group; X = undefined) with phenylpropylamines (II; R1 = protecting group) to give aminoketones (III; R, R1 as above) followed by reduction and deprotection. Thus, 5-(α-bromoacetyl)-8-benzyloxy-2(1H)-quinolinone and (R)-4-methoxy-α-methyl-N-benzylbenzeneethanamine were refluxed overnight with NaHCO3 in CH2Cl2/DMF to give 91% III (R, R1 = PhCH2) as the hydrochloride. The latter in CH2Cl2/MeOH at -60° was treated with NaBH4 followed by stirring for 30 min. and addition of H2O at -10° to give 86% 5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl](phenylmethyl)amino]ethyl]-8-(phenylmethoxy)-2(1H)-quinolinone as the hydrochloride. Hydrogenolysis in EtOH/H2O over Pd/C afforded CHF4226 hydrochloride.

IT 137888-11-0P 147568-66-9P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of CHF4226 via coupling of protected acetylquinolones with chiral phenylpropylamines)

RN 137888-11-0 CA

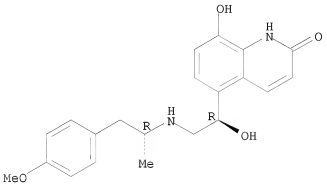
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



RN 147568-66-9 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 8 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 143:332556 CA
TITLE: Preparation of 8-hydroxy-5-[(-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino][ethyl]-2(1H)-quinolinone monohydrochloride in crystalline form
INVENTOR(S): Pivetti, Fausto; Pighi, Roberto
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005089760	A1	20050929	WO 2005-EP3144	20050324
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005224032	A1	20050929	AU 2005-224032	20050324
CA 2560650	A1	20050929	CA 2005-2560650	20050324
EP 1729773	A1	20061213	EP 2005-730069	20050324
EP 1729773	B1	20080702		
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
CN 1929840	A	20070314	CN 2005-80007638	20050324
BR 2005008213	A	20070717	BR 2005-8213	20050324
JP 2007530489	T	20071101	JP 2007-504359	20050324
AT 399552	T	20080715	AT 2005-730069	20050324
ES 2309739	T3	20081216	ES 2005-730069	20050324
KR 2007001946	A	20070104	KR 2006-715966	20060808
MX 2006010515	A	20070330	MX 2006-10515	20060914
IN 2006DN05463	A	20070803	IN 2006-DN5463	20060920
NO 2006004274	A	20061013	NO 2006-4274	20060921
US 20070197586	A1	20070823	US 2007-593571	20070111
PRIORITY APPLN. INFO.:			EP 2004-7045 A	20040324
			WO 2005-EP3144 W	20050324

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

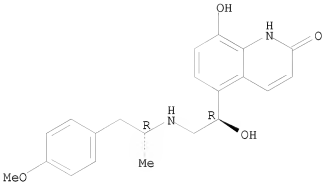
AB The invention relates to 8-hydroxy-5-[(1R)-1-hydroxy-2[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone monohydrochloride (TA 2005) (I)in crystalline form, provided with suitable characteristics in order to be used for the preparation of pharmaceutical compns. for inhalation in combination with suitable carriers or vehicles and the process for its preparation I was dissolved in EtOH-water mixture and crystallized by adding diisopropyl ether.

IT 137888-11-0, TA 2005
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of hydroxymethoxyphenylmethylethyl)aminoethylquinolinone in crystalline form)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 8 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 143:332487 CA
TITLE: Pharmaceutical formulations dry powder inhalants comprising a low-dose active ingredient
INVENTOR(S): Bilzi, Roberto; Armanni, Angela; Rastelli, Roberto; Cocconi, Daniela; Musa, Rossella
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005089717	A1	20050929	WO 2005-EP2789	20050316
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005224008	A1	20050929	AU 2005-224008	20050316
CA 2560226	A1	20050929	CA 2005-2560226	20050316
EP 1729728	A1	20061213	EP 2005-716109	20050316
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,				

HR, LV, MK, YU

CN 1942172	A	20070404	CN 2005-80010973		20050316
BR 2005008170	A	20070807	BR 2005-8170		20050316
ZA 2006007700	A	20080528	ZA 2006-7700		20050316
RU 2371171	C2	20091027	RU 2006-133038		20050316
NO 2006004161	A	20061017	NO 2006-4161		20060914
KR 2006130216	A	20061218	KR 2006-718864		20060914
MX 2006010593	A	20070216	MX 2006-10593		20060915
US 20070202053	A1	20070830	US 2007-592701		20070509
PRIORITY APPLN. INFO.:			EP 2004-6430	A	20040317
			WO 2005-EP2789	W	20050316

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

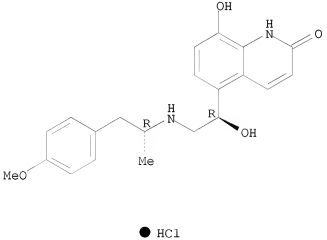
AB The invention provides a formulation to be administered as dry powder for inhalation suitable for efficacious delivery of low-dose active ingredients to the lower respiratory tract of patients. In particular, the invention provides a formulation comprising microparticles constituted of microparticles of a low-dosage strength active ingredient and microparticles of an excipient wherein the mean mass diameter of the microparticles comprises 2-15 μ, at least 10% of the microparticles has a mass diameter of >0.5 μ. Thus, a formulation was prepared by using carmoterol monohydrochloride and Mg stearate carrier particles.

IT 137888-11-0 147568-66-9, Carmoterol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical dry powder inhalants comprising low-dose active ingredient)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

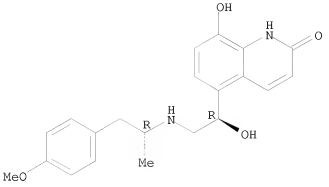
Absolute stereochemistry.



RN 147568-66-9 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L5             9 S L3 AND SALT

     FILE 'CA' ENTERED AT 10:58:17 ON 08 MAR 2010
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L7            11 S L6 AND CRYSTAL?
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L9            79 L6 NOT L7

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L11           42 L10 AND PY<2006

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L11  ANSWER 1 OF 42  CA  COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:         146:190495  CA
TITLE:                    Inhalant formulation containing cyclodextrin
                          sulfoalkyl ether and corticosteroid prepared from a
                          unit dose suspension
INVENTOR(S):              Pipkin, James D.; Zimmerer, Rupert O.; Thompson, Diane
                          O.; Mosher, Gerold L.
PATENT ASSIGNEE(S):       CyDex, Inc., USA
```

SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of Appl. No. PCT/US2005/000084.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070020196	A1	20070125	US 2006-479937	20060630
WO 2005065651	A1	20050721	WO 2005-US84	20041231 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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KR 2007005586	A	20070110	KR 2006-715501	20060731
KR 2007007075	A	20070112	KR 2006-715494	20060731
WO 2008005691	A1	20080110	WO 2007-US71748	20070621
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PRIORITY APPLN. INFO.:

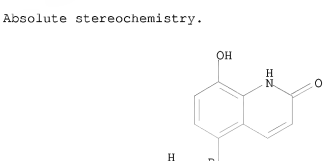
US 2003-533628P	P	20031231
WO 2005-US84	A2	20041231
WO 2004-US82	W	20041231
WO 2004-US84	W	20041231
US 2006-479937	A	20060630

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 146:190495

AB An inhalable unit dose liquid formulation containing cyclodextrin sulfoalkyl ether (SAE-CD) and corticosteroid is provided. The formulation is adapted for administration to a subject by nebulization with any known nebulizer. The formulation can be included in a kit. The formulation is administered as an aqueous solution or concentrated composition The formulation is employed in an improved nebulization system for administering corticosteroid by inhalation. SAE-CD present in the formulation significantly enhances the chemical stability of corticosteroid, such as budesonide. A method of administering the formulation by inhalation is provided. The formulation can also be administered by conventional nasal delivery apparatus The formulation is prepared by mixing SAE-CD, in solid or liquid (dissolved) form,

with an inhalable suspension-based unit dose formulation.
IT 137888-11-0, TA-2005
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhalant formulation containing cyclodextrin sulfoalkyl ether and corticosteroid prepared from unit dose suspension)
RN 137888-11-0 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 2 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 145:511665 CA
TITLE: Pharmaceutical solution formulations for pressurized metered dose inhalers
INVENTOR(S): Lewis, David Andrew; Meakin, Brian John; Brambilla, Gaetano
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: U.S. Pat. Appl. Publ., 15pp., Cont.-in-part of U.S. Ser. No. 289,479.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060257324	A1	20061116	US 2006-408026	20060421
WO 2001089480	A1	20011129	WO 2000-EP4635	20000522 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,				

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SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
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DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US	20020025299	A1	20020228	US 2001-860689	20010521 <--
US	6716414	B2	20040406		
US	20040047809	A1	20040311	US 2003-640005	20030814 <--
US	7018618	B2	20060328		
US	20060083693	A1	20060420	US 2005-289479	20051130
AU	2007241336	A1	20071101	AU 2007-241336	20070419
CA	2649556	A1	20071101	CA 2007-2649556	20070419
WO	2007121913	A2	20071101	WO 2007-EP3420	20070419
WO	2007121913	A3	20080306		

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EP	2010190	A2	20090107	EP 2007-724357	20070419

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AL, BA, HR, MK, RS

JP	2009534333	T	20090924	JP 2009-505773	20070419
KR	2008110985	A	20081222	KR 2008-718846	20080730
CN	101389341	A	20090318	CN 2007-80006951	20080827
MX	2008013460	A	20081029	MX 2008-13460	20081020
US	20090130026	A1	20090521	US 2008-255075	20081021

PRIORITY APPLN. INFO.:

WO 2000-EP4635	A	20000522
US 2001-860689	A1	20010521
US 2003-640005	A1	20030814
US 2005-289479	A2	20051130
US 2006-408026	A	20060421
WO 2007-EP3420	W	20070419

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A method for delivering 2 or more active drug substances to the lungs by inhalation from a single pressurized metered dose inhaler product, the inhaler containing a HFA/cosolvent based solution formulation wherein all the active drug substances are fully dissolved in the formulation is disclosed. Thus, a matrix of formulations containing (12 μg/μL) formoterol fumarate was prepared in HFA 134a containing 12% EtOH. The solns. were stable for 2 years stored at 4°.

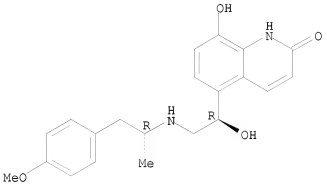
IT 137888-11-0, Carmoterol hydrochloride
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical solution formulations for pressurized metered dose inhalers)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX

NAME)

Absolute stereochemistry.



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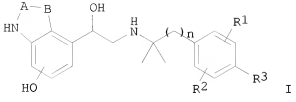
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 3 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 144:51594 CA
TITLE: Preparation of quinolones, benzoxazolones, and benzoxazinones as beta agonists for the treatment of respiratory diseases
INVENTOR(S): Konetzki, Ingo; Bouyssou, Thierry; Lustenberger, Philipp; Schnapp, Andreas; Santagostino, Marco; Hoenke, Christoph
PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany
SOURCE: U.S. Pat. Appl. Publ., 20 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050277632	A1	20051215	US 2005-125890	20050510 <--
US 7307076	B2	20071211		
PRIORITY APPLN. INFO.:			EP 2004-425342 A	20040513
			US 2004-578528P P	20040610

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 144:51594; MARPAT 144:51594
GI



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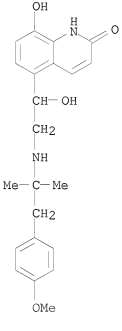
AB Title compds. [I; n = 1, 2; A = CO, SO, SO2, CR4R5; B = O, NR6, CH2, SCR7R8, NR6CR7R8, CH2CR7R8, OCR9R10, CH:CH; R1, R2 = H, alkyl, alkoxy, halo, OH; R3 = H, alkyl, OH, halo, alkoxy, CO2H, alkoxycarbonyl, etc.; R4, R5 = H, alkyl, OH, halo, alkoxy, CO2H, alkoxycarbonyl; R6 = H, alkyl; R7, R8 = H, alkyl; R9, R10 = alkyl], were prepared as beta agonists for the treatment of respiratory diseases (no data). Thus, 8-benzyloxy-5-oxiranyl-1H-quinolin-2-one (preparation given) and 2-(4-methoxyphenyl)-1,1-dimethylethylamine were heated together in BuOH for 6 h at 140° to give 32% aminoalc, which was hydrogenolyzed in MeOH over Pd/C at ambient temperature and pressure to give 59% 8-hydroxy-5-[1-hydroxy-2-[2-(4-methoxyphenyl)-1,1-dimethylethylamino]ethyl]-1H-quinolin-2-one.

IT 869868-03-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinolones, benzoxazolones, and benzoxazinones as beta agonists for the treatment of respiratory diseases)

RN 869868-03-1 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1,1-dimethylethyl]amino]ethyl]- (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 144:40791 CA
TITLE: Combinations comprising antimuscarinic agents and β-adrenergic agonists
INVENTOR(S): Gras Escardo, Jordi; Llenas Calvo, Jesus; Ryder, Hamish; Orviz Diaz, Pio
PATENT ASSIGNEE(S): Almirall Prodesfarma S.A., Spain
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005115463	A1	20051208	WO 2005-EP5837	20050531 <--
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ES 2257152	B1	20070701		
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AU 2005247108	B2	20080911		
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CA 2568568	A1	20051208	CA 2005-2568568	20050531 <--
CA 2569077	A1	20051208	CA 2005-2569077	20050531 <--
LU 91214	A1	20060126	LU 2005-91214	20050531
GB 2419819	A	20060510	GB 2005-26502	20050531
GB 2419819	B	20070221		
JP 2006527183	T	20061130	JP 2006-508319	20050531
EP 1761280	A1	20070314	EP 2005-747758	20050531
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EP 1763368	A1	20070321	EP 2005-750538	20050531
EP 1763368	B1	20090311		
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EP	1765404	B1	20081231		
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CN	1972716	A	20070530	CN 2005-80017694	20050531
HU	2006000139	A2	20070628	HU 2006-139	20050531
CN	101018566	A	20070815	CN 2005-80017692	20050531
NZ	544539	A	20070928	NZ 2005-544539	20050531
BR	2005011660	A	20080102	BR 2005-11660	20050531
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EP	1891973	A1	20080227	EP 2007-19644	20050531
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EP	2002845	A2	20081217	EP 2008-14859	20050531
EP	2002845	A3	20090225		
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AT	419011	T	20090115	AT 2005-748688	20050531
PT	1765404	E	20090331	PT 2005-748688	20050531
ES	2317245	T3	20090416	ES 2005-748688	20050531
SG	153106	A1	20090629	SG 2009-3617	20050531
SG	153107	A1	20090629	SG 2009-3618	20050531
RU	2373935	C2	20091127	RU 2006-142331	20050531
EP	2138188	A1	20091230	EP 2009-11129	20050531
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AT	454904	T	20100115	AT 2007-23760	20050531
RU	2379033	C2	20100120	RU 2006-146673	20050531

US	20060154934	A1	20060713	US	2006-375308	20060314
MX	2006004124	A	20060627	MX	2006-4124	20060411
US	20060205702	A1	20060914	US	2006-405888	20060418
HK	1090306	A1	20070504	HK	2006-112215	20061107
NO	2006005477	A	20061222	NO	2006-5477	20061128
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MX	2006013847	A	20070301	MX	2006-13847	20061128
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KR	2007018105	A	20070213	KR	2006-725298	20061130
KR	2007024556	A	20070302	KR	2006-725295	20061130
IN	2006DN07293	A	20070427	IN	2006-DN7293	20061204
US	20070167489	A1	20070719	US	2007-726982	20070323
HK	1095757	A1	20090313	HK	2007-103198	20070326
HK	1096605	A1	20090605	HK	2007-103580	20070403
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US	20090099148	A1	20090416	US	2008-335849	20081216
US	20090111785	A1	20090430	US	2008-339263	20081219
US	20090176751	A1	20090709	US	2009-405613	20090317
US	20100048615	A1	20100225	US	2009-607409	20091028
US	20100056486	A1	20100304	US	2009-616960	20091112

PRIORITY APPLN. INFO.:

ES	2004-1312	A 20040531
WO	2005-EP1969	A 20050224
WO	2005-GB722	A 20050225
WO	2005-GB740	A 20050225
EP	2005-746222	A3 20050531
EP	2005-747758	A3 20050531
EP	2005-748688	A3 20050531
EP	2005-750538	A3 20050531
EP	2005-751702	A3 20050531
EP	2005-759006	A3 20050531
US	2005-141169	B1 20050531
US	2005-141427	B1 20050531
WO	2005-EP5836	W 20050531
WO	2005-EP5837	W 20050531
WO	2005-EP5840	W 20050531
WO	2005-EP5841	W 20050531
US	2006-375308	B1 20060314
US	2006-405888	B1 20060418
US	2006-628522	A1 20061129
US	2007-726982	B1 20070323
EP	2008-14479	A3 20080814
US	2008-335849	B1 20081216
US	2008-339263	B1 20081219

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

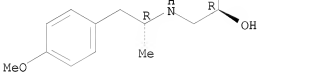
AB A combination is disclosed which comprises (a) a β2 agonist and (b) an antagonist of M3 muscarinic receptors which is (3R)-1-phenethyl-3-(9H-xanthene-9-carbonyloxy)-1-azoniabicyclo[2.2.2]octane, in the form of a salt having an anion X, which is a pharmaceutically acceptable anion of a mono or polyvalent acid.

IT 137888-11-0, Ta-2005
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(antimuscarinic agent combinations with β-adrenergic agonists)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 42 CA COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 144:17179 CA

TITLE: Muscarinic M3 antagonist combination with β-adrenergic agonists, and use for treatment of respiratory conditions

INVENTOR(S): Gras Escardo, Jordi; Llenas Calvo, Jesus; Ryder, Hamish; Orviz Diaz, Pio

PATENT ASSIGNEE(S): Almirall Prodesfarma S. A., Spain

SOURCE: Fr. Demande, 45 pp.
CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

FR 2870744	A1	20051202	FR 2005-5473	20050531	<--
FR 2870744	B1	20061208			
ES 2257152	A1	20060716	ES 2004-1312	20040531	
ES 2257152	B1	20070701			
IT 2005MI1021	A1	20050831	IT 2005-MI1021	20050531	<--
IT 1365624	B1	20090911			
IE 2005000366	A1	20051130	IE 2005-366	20050531	<--
US 20050267135	A1	20051201	US 2005-141169	20050531	<--
NL 1029151	A1	20051205	NL 2005-1029151	20050531	<--
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WO 2005115462	A1	20051208	WO 2005-EP5836	20050531	<--

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WO 2005115466	A1	20051208	WO 2005-EP5840	20050531	<--

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WO 2005115467	A1	20051208	WO 2005-EP5841	20050531	<--

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US 20050288266 A1 20051229 US 2005-141427 20050531 <--
SI 21784 A 20051231 SI 2005-163 20050531 <--
LU 91214 A1 20060126 LU 2005-91214 20050531
GR 2005100269 A 20060201 GR 2005-100269 20050531
GR 1006045 B2 20080908
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GB 2419819 B 20070221
JP 2006527183 T 20061130 JP 2006-508319 20050531
BE 1016608 A5 20070206 BE 2005-268 20050531
EP 1761280 A1 20070314 EP 2005-747758 20050531
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EP 1763368 A1 20070321 EP 2005-750538 20050531
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EP 1763369 A1 20070321 EP 2005-751702 20050531
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CN 1960761 A 20070509 CN 2005-80017693 20050531
CN 1972716 A 20070530 CN 2005-80017694 20050531
HU 2006000139 A2 20070628 HU 2006-139 20050531
NZ 544539 A 20070928 NZ 2005-544539 20050531
BR 2005011662 A 20080102 BR 2005-11662 20050531
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BR 2005011667 A 20080102 BR 2005-11667 20050531
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EP 1891974 A1 20080227 EP 2007-19646 20050531
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CH 696962 A5 20080229 CH 2005-85 20050531
ES 2293849 A1 20080316 ES 2006-50034 20050531
ES 2293849 B2 20090416
EP 1905451 A1 20080402 EP 2007-23760 20050531
EP 1905451 B1 20100113
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU
EP 2002843 A2 20081217 EP 2008-14478 20050531
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ES	2318498	T3	20090501	ES 2005-751702	20050531
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EP	2002844	A2	20081217	EP 2008-14479	20080814
EP	2002844	A3	20090304		
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US	20090099148	A1	20090416	US 2008-335849	20081216
US	20090111785	A1	20090430	US 2008-339263	20081219
US	20100048615	A1	20100225	US 2009-607409	20091028
US	20100056486	A1	20100304	US 2009-616960	20091112

PRIORITY APPLN. INFO.:

ES 2004-1312	A	20040531
WO 2005-EP1969	A	20050224
WO 2005-GB722	A	20050225
WO 2005-GB740	A	20050225
EP 2005-746222	A3	20050531
EP 2005-747758	A3	20050531
EP 2005-748688	A3	20050531
EP 2005-750538	A3	20050531
EP 2005-751702	A3	20050531
EP 2005-759006	A3	20050531

	US 2005-141169	B1 20050531
	US 2005-141427	B1 20050531
	WO 2005-EP5836	W 20050531
	WO 2005-EP5840	W 20050531
	WO 2005-EP5841	W 20050531
	US 2006-375308	B1 20060314
	US 2006-405888	B1 20060418
	US 2007-726982	B1 20070323
	EP 2008-14479	A3 20080814
	US 2008-335849	B1 20081216
	US 2008-339263	B1 20081219

OTHER SOURCE(S): MARPAT 144:171179

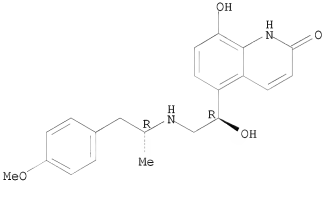
AB The invention discloses a combination, a product, a kit of parts, and a packaging including (a) a β2-agonist and (b) a muscarinic M3 receptor antagonist [e.g. 3(R)-(2-hydroxy-2,2-dithien-2-ylacetoxy)-1-(3-phenoxypropyl)-1-azoniabicyclo[2.2.2]-octane], in the form of a salt having an anion X which is a pharmaceutically acceptable anion of a mono- or polyfunctional acid, their use and a process of treatment of a patient having, or susceptible to, a respiratory disease.

IT 137888-11-0, TA-2005
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(muscarinic M3 antagonist combination with β-adrenergic agonists for treatment of respiratory conditions)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 42 CA COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 144:6792 CA

TITLE: Preparation of hydroxy-substituted quinolinones, benzoxazinones and benzoxazolones as treatment for respiratory diseases

INVENTOR(S): Konetzki, Ingo; Bouyssou, Thierry; Lustenberger, Philipp; Santagostino, Marco; Schnapp, Andreas; Hoenke, Christoph

PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany; Boehringer Ingelheim Pharma Gmbh & Co. KG

SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005110990	A1	20051124	WO 2005-EP5027	20050510 <--
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2565243	A1	20051124	CA 2005-2565243	20050510 <--
EP 1789394	A1	20070530	EP 2005-740683	20050510
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JP 2007537187	T	20071220	JP 2007-512067	20050510
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			WO 2005-EP5027 W	20050510

OTHER SOURCE(S): MARPAT 144:6792

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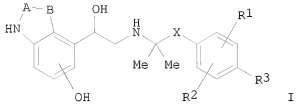

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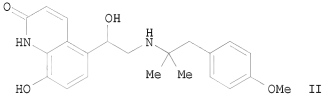


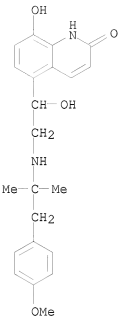
II

AB Title compds. I [X = (CH2)n; n = 1-2; A = CO, SO, SO2, etc.; B = O, CH2, CHCH, etc.; R1 and R2 independently = H, alkyl, halo, etc.; R3 = H, OH, COOH, etc.] and their pharmaceutically acceptable salts, are prepared and disclosed as treatment for respiratory diseases. Thus, e.g., II was prepared by coupling of 8-benzyloxy-5-oxiranyl-1H-quinolin-2-one (preparation given) with 2-(4-methoxy-phenyl)-1,1,-dimethyl-ethylamine followed by reduction using palladium on carbon as catalyst. I should prove useful in the treatment of respiratory diseases. Pharmaceutical compns. comprising I are disclosed.

IT 869868-03-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of hydroxy-substituted quinolinones, benzoxazinones and benzoxazolones as treatment for respiratory diseases)

RN 869868-03-1 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1,1-dimethylethyl]amino]ethyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 143:483202 CA
TITLE: Medicinal aerosol formulation products with improved chemical stability
INVENTOR(S): Meakin, Brian; Lewis, David; Johnson, Robert; Church, Tanya
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005112902	A2	20051201	WO 2005-EP2041	20050225 <--
WO 2005112902	A3	20060504		

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,

RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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CA 2565747	A1	20051201	CA 2005-2565747	20050225	<--
EP 1746981	A2	20070131	EP 2005-715569	20050225	
EP 1746981	B1	20080813			

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CN 1950075	A	20070418	CN 2005-80014700	20050225	
BR 2005010852	A	20071127	BR 2005-10852	20050225	
JP 2007537170	T	20071220	JP 2007-511888	20050225	
AT 404185	T	20080815	AT 2005-715569	20050225	
ES 2309722	T3	20081216	ES 2005-715569	20050225	
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ZA 2006008742	A	20080730	ZA 2006-8742	20061019	
KR 2007010159	A	20070122	KR 2006-722859	20061031	
US 20070086953	A1	20070419	US 2006-558793	20061110	
MX 2006013189	A	20070214	MX 2006-13189	20061113	
NO 2006005722	A	20061212	NO 2006-5722	20061212	

PRIORITY APPLN. INFO.:	EP 2004-11425	A	20040513
	WO 2005-EP2041	W	20050225

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 143:483202

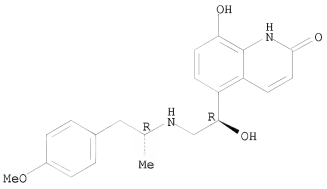
AB The present invention relates to a medicinal aerosol formulation product with improved chemical stability, comprising a pressurized metered dose inhaler, comprising an aerosol canister equipped with a metering valve provided with sealing rings and/or gaskets made of a vulcanizate of an elastomeric composition of a butyl rubber, a crosslinking agent for the butyl rubber, and an accelerator for the crosslinking agent, wherein the accelerator includes a polysulfide compound derived from a substituted dithiocarbonic acid or derivative thereof, wherein the pressurized metered dose inhaler contains in the aerosol canister a medicinal aerosol formulation containing a long acting β2 agonist, a hydrofluorocarbon propellant, a co-solvent, and a mineral acid as a stabilizer for the active ingredient.

IT 137888-11-0, TA 2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(medicinal aerosol products with improved chemical stability)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 143:292566 CA
TITLE: Stable pharmaceutical solution formulations for pressurized metered dose inhalers
INVENTOR(S): Lewis, David; Ganderton, David; Meakin, Brian; Delcanale, Maurizio; Pivetti, Fausto
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.P.A., Italy
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005084640	A1	20050915	WO 2005-EP2042	20050225 <--
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US 20050220718	A1	20051006	US 2005-65569	20050225 <--

US 7381402	B2	20080603			
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CN 1921835	A	20070228	CN 2005-80006060		20050225
CN 100457087	C	20090204			
JP 2007523942	T	20070823	JP 2007-500175		20050225
SG 150558	A1	20090330	SG 2009-1439		20050225
NZ 549138	A	20090828	NZ 2005-549138		20050225
IN 2006KN02173	A	20070518	IN 2006-KN2173		20060801
ZA 2006006577	A	20090429	ZA 2006-6577		20060807
MX 2006009584	A	20061113	MX 2006-9584		20060823
US 20070025920	A1	20070201	US 2006-467515		20060825
NO 2006004359	A	20060926	NO 2006-4359		20060926
HK 1103280	A1	20091106	HK 2007-107282		20070706
PRIORITY APPLN. INFO.:			US 2004-547798P	P	20040227
			EP 2004-11424	A	20040513
			WO 2005-EP2042	W	20050225

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

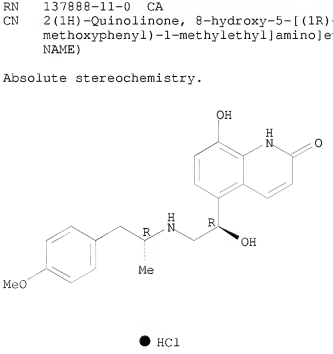
AB Disclosed are aerosol solution formulations for use in an aerosol inhaler which comprise 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-2(1H)-quinolinone or a salt thereof, in particular the hydrochloride salt (TA 2005), as an active ingredient, a propellant containing a hydrofluoroalkane, and a cosolvent, stabilized by addition of a specific small amount of a high concentrated phosphoric acid and optionally by the use of a suitable can having part or all of its internal metallic surfaces lined with an inert organic coating.

IT 137888-11-0, TA 2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stable pharmaceutical solns. for pressurized metered dose inhalers)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 143:159551 CA
TITLE: Inhalant formulation containing cyclodextrin sulfoalkyl ether and corticosteroid prepared from a unit dose suspension
INVENTOR(S): Zimmerer, Rupert O.; Pipkin, James D.; Thompson, Diane O.; Mosher, Gerold L.
PATENT ASSIGNEE(S): Cydex, Inc., USA
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005065651	A1	20050721	WO 2005-US84	20041231 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004312095	A1	20050721	AU 2004-312095	20041231 <--
CA 2552641	A1	20050721	CA 2004-2552641	20041231 <--
CN 1921834	A	20070228	CN 2004-80042227	20041231
BR 2004018232	A	20070427	BR 2004-18232	20041231
JP 2007517068	T	20070628	JP 2006-547614	20041231
EP 1718276	A2	20061108	EP 2005-704919	20050103
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
IN 2006DN03704	A	20070713	IN 2006-DN3704	20060628
MX 2006007583	A	20060927	MX 2006-7583	20060630
US 20070020196	A1	20070125	US 2006-479937	20060630
KR 2007005586	A	20070110	KR 2006-715501	20060731
KR 2007007075	A	20070112	KR 2006-715494	20060731
KR 2007007076	A	20070112	KR 2006-715502	20060731
PRIORITY APPLN. INFO.:			US 2003-533628P P	20031231
			WO 2004-US82 W	20041231
			WO 2004-US84 W	20041231
			WO 2005-US84 W	20041231

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 143:159551
AB An inhalable unit dose liquid formulation containing SAE-CD and corticosteroid is provided. The formulation is adapted for administration to a subject by nebulization with any known nebulizer. The formulation can be included

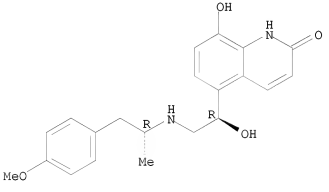
in a kit. The formulation is administered as an aqueous solution or concentrated composition The formulation is employed in an improved nebulization system for administering corticosteroid by inhalation. SAE-CD present in the formulation significantly enhances the chemical stability of corticosteroid, such as budesonide. A method of administering the formulation by inhalation is provided. The formulation can also be administered by conventional nasal delivery apparatus The formulation is prepared by mixing SAE-CD, in solid or liquid (dissolved) form, with an inhalable suspension-based unit dose formulation. Thus, an inhalable solution contained budesonide and Captisol.

IT 137888-11-0, TA-2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhalant formulation containing cyclodextrin sulfoalkyl ether and corticosteroid prepared from unit dose suspensions)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 42 CA COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 143:159550 CA

TITLE: Inhalant formulation containing sulfoalkyl ether γ-cyclodextrin and corticosteroid

INVENTOR(S): Pipkin, James D.; Zimmerer, Rupert O.; Thompson, Diane O.; Mosher, Gerold L.

PATENT ASSIGNEE(S): Cydex, Inc., USA

SOURCE: PCT Int. Appl., 78 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005065649	A1	20050721	WO 2005-US85	20041231 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004312096	A1	20050721	AU 2004-312096	20041231 <--
CA 2551826	A1	20050721	CA 2004-2551826	20041231 <--
EP 1729724	A1	20061213	EP 2005-704920	20041231
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1921830	A	20070228	CN 2004-80042228	20041231
BR 2004018386	A	20070522	BR 2004-18386	20041231
JP 2007517069	T	20070628	JP 2006-547615	20041231
IN 2006DN03707	A	20070803	IN 2006-DN3707	20060628
MX 2006007582	A	20060927	MX 2006-7582	20060630
US 20070020298	A1	20070125	US 2006-479938	20060630
KR 2007005586	A	20070110	KR 2006-715501	20060731
KR 2007007075	A	20070112	KR 2006-715494	20060731
PRIORITY APPLN. INFO.:			US 2003-533628P	P 20031231
			WO 2004-US82	W 20041231
			WO 2004-US84	W 20041231
			WO 2005-US85	W 20041231

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 143:159550

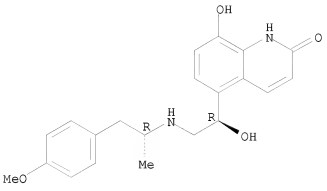
AB An inhalable formulation containing SEA-γ-CD and corticosteroid is provided. The formulation is adapted for administration to a subject by nebulization with any known nebulizer. The formulation can be included in a kit. The formulation is administered as an aqueous solution, however, it can be stored as a dry powder, ready-to-use solution, or concentrated composition The formulation is employed in an improved nebulization system for administering corticosteroid by inhalation. SAE-γ-CD present in the formulation significantly enhances the chemical stability of budesonide. A method of administering the formulation by inhalation is provided. The formulation can also be administered by conventional nasal delivery apparatus The formulation can include one or more addnl. therapeutic agents for use in combination with the corticosteroid. SAE-γ-CD is especially useful for solubilizing esterified corticosteroids.

IT 137888-11-0, Ta2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhalant formulation containing sulfoalkyl ether γ-cyclodextrin and corticosteroid)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 11 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 143:159547 CA
TITLE: Inhalant formulation containing sulfoalkyl ether cyclodextrin and corticosteroid
INVENTOR(S): Pipkin, James D.; Zimmerer, Rupert O.; Thompson, Diane O.; Mosher, Gerold L.
PATENT ASSIGNEE(S): Cydex, Inc., USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005065435	A2	20050721	WO 2005-US82	20041231 <--
WO 2005065435	A3	20050901		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004311478	A1	20050721	AU 2004-311478	20041231 <--
CA 2551749	A1	20050721	CA 2004-2551749	20041231 <--

BR 2004018276	A	20070502	BR 2004-18276		20041231
CN 1976679	A	20070606	CN 2004-80042229		20041231
JP 2007517067	T	20070628	JP 2006-547613		20041231
EP 1732512	A2	20061220	EP 2005-704917		20050103
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK					
IN 2006DN03708	A	20070713	IN 2006-DN3708		20060628
US 20070020299	A1	20070125	US 2006-479979		20060630
MX 2006007581	A	20070309	MX 2006-7581		20060630
KR 2007005586	A	20070110	KR 2006-715501		20060731
KR 2007007075	A	20070112	KR 2006-715494		20060731
US 20070202054	A1	20070830	US 2006-613187		20061219
PRIORITY APPLN. INFO.:			US 2003-533628P	P	20031231
			WO 2004-US82	W	20041231
			WO 2004-US84	W	20041231
			WO 2005-US82	W	20041231
			US 2006-479979	A2	20060630

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 143:159547

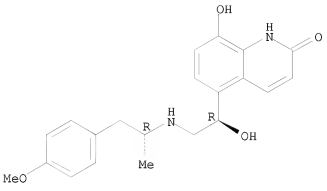
AB An inhalable formulation containing sulfoalkyl ether cyclodextrin (SAE-CD) and corticosteroid is provided. The formulation is adapted for administration to a subject by nebulization with any known nebulizer. The formulation can be included in a kit. The formulation is administered as an aqueous solution, however, it can be stored as a dry powder, ready-to-use solution, or concentrated composition The formulation is employed in an improved nebulization system for administering corticosteroid by inhalation. SAE-CD present in the formulation significantly enhances the chemical stability of budesonide. A method of administering the formulation by inhalation is provided. The formulation can also be administered by conventional nasal delivery apparatus The contents of one capsule containing 12 μg of formoterol fumarate blended with 25 mg of lactose was emptied into a vial to which was added 3 mL of 3 mM citrate buffer (pH 4.5). The contents of the vial were vortexed to dissolve the solids present. Approx. 10.4 mg of budesonide and 1247.4 mg of Captisol were ground together with a mortar and pestle and transferred to a 10 mL flask. Buffer solution was added, and the mixture was vortexed, sonicated and an addnl. 1.4 mg budesonide added. After shaking overnight, the solution was filtered through a 0.22 μm Durapore Millex-GV Millipore syringe filter unit. The resulting budesonide concentration was ~1 mg/mL. Approx. 1 mL of the budesonide solution was added to the formoterol fumarate buffered solution The resulting solution remained essentially clear for a period of at least one month at room ambient conditions protected from light.

IT 137888-11-0, TA-2005
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(β2-adrenoceptor agonist, as therapeutic agent in formulation; inhalant formulation containing sulfoalkyl ether cyclodextrin and corticosteroid)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 142:348663 CA
TITLE: Positive interaction of the β2-agonist CHF 4226.01 with budesonide in the control of bronchoconstriction induced by acetaldehyde in the guinea-pigs
AUTHOR(S): Rossoni, Giuseppe; Manfredi, Barbara; Razzetti, Roberta; Civelli, Maurizio; Bongrani, Stefano; Berti, Ferruccio
CORPORATE SOURCE: Department of Pharmacological Sciences, Department of Pharmacology, Chemotherapy and Medical Toxicology, University of Milan, Milan, 20129, Italy
SOURCE: British Journal of Pharmacology (2005), 144(3), 422-429
CODEN: BJPCBM; ISSN: 0007-1188
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Pretreatment of anesthetized guinea-pigs with either CHF 4226.01 (8-hydroxy-5-[(1R)-1-hydroxy-2-[N-[(1R)-2-(p-methoxyphenyl)-1-methylethyl]amino]ethyl]carbostyril hydrochloride), formoterol or budesonide reduced acetaldehyde (AcCHO)-evoked responses in the lungs with a rank order of potency CHF 4226.01 (ED50 values, from 1.88 to 3.31 pmol) > formoterol (ED50 values, from 3.03 to 5.51 pmol) » budesonide (ED50 values, from 335 to 458 nmol). The duration of action of CHF 4226.01 in antagonizing the airway obstruction elicited by AcCHO was also substantially longer than formoterol (area under the curve) at 10 pmol, 763±58 and 480±34, resp.; P < 0.01. Continuous infusion of a subthreshold dose of AcCHO enhanced the intratracheal pressure (ITP) increases caused by subsequent challenges with substance P (from 9.7±0.8 to 27.5±1.6 cm H2O as a peak, P < 0.001). Pretreatment with either CHF 4226.01 or formoterol prevented the sensitizing effect of AcCHO

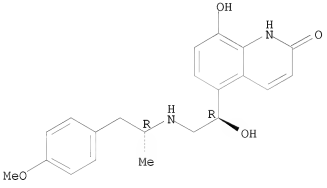
on substance P responses (ED50 values, 2.85 and 6.11 pmol, resp.; P < 0.01). The ED50 value of budesonide (396 nmol) in preventing AcCHO-evoked ITP increase was reduced when this glucocorticoid was combined with 0.1 pmol CHF 4226.01 (ED50 76 nmol; P < 0.001). CHF 4226.01/budesonide was two-fold more effective (P < 0.01) than the formoterol/budesonide combination. These results suggest that CHF 4226.01/budesonide, by optimizing each other's beneficial potential in the control of pulmonary changes caused by AcCHO in the guinea-pigs, may represent a new fixed combination in asthma.

IT 137888-11-0, CHF 4226.01
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(pos. interaction of the β2-agonist CHF 4226.01 with budesonide in control of bronchoconstriction induced by acetaldehyde in the guinea-pigs)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 42 CA COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 142:225787 CA

TITLE: Pharmaceuticals for inhalation comprising steroids and a betamimetic

INVENTOR(S): Meade, Christopher John Montague; Pairet, Michel; Pieper, Michael P.; Konetzki, Ingo

PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany; Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G.

SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005013945	A2	20050217	WO 2004-EP8023	20040717 <--
WO 2005013945	A3	20050623		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2534693	A1	20050217	CA 2004-2534693	20040717 <--
EP 1654001	A2	20060510	EP 2004-741127	20040717

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

JP 2007501194	T	20070125	JP 2006-522264	20040717
US 20050059643	A1	20050317	US 2004-903769	20040730 <--

PRIORITY APPLN. INFO.:

EP 2003-17814	A	20030805
US 2003-508120P	P	20031002
WO 2004-EP8023	W	20040717

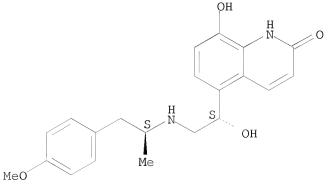
AB The present invention relates to pharmaceutical compns. comprising 1 steroid and a betamimetic and processes for preparing the compns. and their use in the treatment of respiratory disorders. Thus, an inhalable powder contained a betamimetic 50, budesonide 200, and lactose 4750 μg/capsule.

IT 734496-04-9
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceuticals for inhalation comprising steroids and betamimetic)

RN 734496-04-9 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 14 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 142:198250 CA
TITLE: Medicaments for inhalation comprising an anticholinergic and a betamimetic
INVENTOR(S): Meade, Christopher John Montague; Pairet, Michel; Pieper, Michael P.; Konetzki, Ingo
PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany
SOURCE: U.S. Pat. Appl. Publ., 33 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050025718	A1	20050203	US 2004-891564	20040715 <--
CA 2534120	A1	20050217	CA 2004-2534120	20040717 <--
WO 2005013994	A1	20050217	WO 2004-EP8013	20040717 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1651224	A1	20060503	EP 2004-741123	20040717
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2007500676	T	20070118	JP 2006-521457	20040717
US 20090155185	A1	20090618	US 2009-349907	20090107

PRIORITY APPLN. INFO.:

EP 2003-17349	A	20030731
US 2003-508124P	P	20031002
US 2004-891564	B3	20040715
WO 2004-EP8013	W	20040717

OTHER SOURCE(S): CASREACT 142:198250; MARPAT 142:198250
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

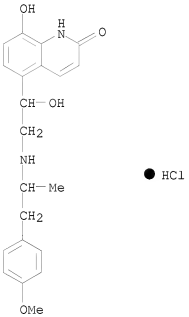
AB A pharmaceutical composition comprising an anticholinergic, e.g., tropium salt I·X- (X = anion of single neg. charge; F, Cl, Br, I, sulfate, phosphate, SO3Me, NO3, maleate, OAc, citrate, fumarate, tartrate, oxalate, succinate, OBz, SO3C6H4Me-4; optionally as racemates, enantiomers, solvates and/or hydrates), quaternary ammonium salt II·X- [R = Me, Et], or alkaloid salt III·X- [A = bond, O, CH2, H2; R1, R2 = Me,

Et, CH2Et, CHMe2 (optionally substituted by OH, F); R3, R4, R5, R6 = H, Me, Et, OMe, OEt, OH, F, Cl, Br, CN, CF3, NO2; R7 = H, Me, Et, OMe, OEt, CH2F, CH2CH2F, OCH2F, OCH2CH2F, CH2OH, CH2CH2OH, CF3, CH2OMe, CH2CH2OMe, CH2OEt, CH2CH2OEt, OAc, OC(:O)Et, OC(:O)CF3, F, Cl, Br], and a betamimetic, e.g., quinolone IV or its enantiomers, optionally together with a pharmaceutically acceptable excipient, the anticholinergic and the betamimetic optionally in the form of their enantiomers, mixts. of their enantiomers, their racemates, their solvates, or their hydrates, processes for preparing them, and their use in the treatment of asthma, COPD, or other inflammatory or obstructive respiratory complaints.

IT 676437-71-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(betamimetic, inhalant formula containing; pharmaceutical composition for inhalation comprising anticholinergic and betamimetic)

RN 676437-71-1 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 15 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 141:230653 CA
TITLE: Novel medicament combination of a highly potent long-lasting β2-agonist and a corticosteroid
INVENTOR(S): Razzetti, Roberta; Pastore, Fiorella
PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1452179	A1	20040901	EP 2003-4184	20030227 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AU 2004216472	A1	20040910	AU 2004-216472	20040227 <--
AU 2004216472	B2	20090806		
CA 2517321	A1	20040910	CA 2004-2517321	20040227 <--
WO 2004075896	A1	20040910	WO 2004-EP1960	20040227 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1603565	A1	20051214	EP 2004-715295	20040227 <--
EP 1603565	B1	20080723		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2004008047	A	20060214	BR 2004-8047	20040227
CN 1753678	A	20060329	CN 2004-80005371	20040227
CN 100370986	C	20080227		
JP 2006519204	T	20060824	JP 2006-501966	20040227
ZA 2005006820	A	20061129	ZA 2005-6820	20040227
EP 1834643	A2	20070919	EP 2007-9204	20040227
EP 1834643	A3	20071024		
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR, AL, LT, LV, MK				
AT 401887	T	20080815	AT 2004-715295	20040227
CN 101244063	A	20080820	CN 2007-10112028	20040227
PT 1603565	E	20081006	PT 2004-715295	20040227
ES 2309503	T3	20081216	ES 2004-715295	20040227
NZ 541997	A	20081224	NZ 2004-541997	20040227
US 20070020190	A1	20070125	US 2005-546619	20050823
IN 2005DN03740	A	20070810	IN 2005-DN3740	20050823
MX 2005009007	A	20051018	MX 2005-9007	20050824 <--
NO 2005003959	A	20051128	NO 2005-3959	20050825 <--
HK 1087009	A1	20080725	HK 2006-107053	20060621

PRIORITY APPLN. INFO.:

EP 2003-4184	A	20030227
CN 2004-80005371	A3	20040227
EP 2004-715295	A3	20040227
WO 2004-EP1960	A	20040227

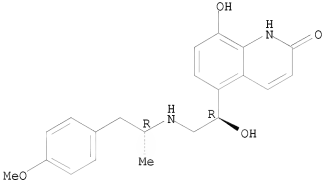
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to the use of a bronchodilator in combination with an anti-inflammatory corticosteroid or an anticholinergic atropine-like derivative for the treatment of respiratory disorders and especially asthma and chronic obstructive pulmonary disease (COPD), and to pharmaceutical compns. containing the two active ingredients. In particular, the invention relates to the use of the long-acting β2-agonist 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl-2(1H)-quinolinone and/or physiol. acceptable salts and/or solvates thereof in combination with a corticosteroid.

IT 137888-11-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiasthmatic combination of a highly potent long-lasting β2-agonist and a corticosteroid)
RN 137888-11-0 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 140:418397 CA
TITLE: Atypical β-adrenoceptor subtypes mediate relaxations of rabbit corpus cavernosum
AUTHOR(S): Teixeira, Cleber E.; Baracat, Juliana S.; Zanesco, Angelina; Antunes, Edson; De Nucci, Gilberto
CORPORATE SOURCE: Department of Pharmacology, Faculty of Medical Sciences, State University of Campinas, Sao Paulo, Brazil
SOURCE: Journal of Pharmacology and Experimental Therapeutics (2004), 309(2), 587-593
CODEN: JPETAB; ISSN: 0022-3565
PUBLISHER: American Society for Pharmacology and Experimental Therapeutics
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This study was performed to characterize the β-adrenoceptor population in rabbit isolated corpus cavernosum (RbCC) by using nonselective and selective β-adrenoceptor agonists and antagonists in functional assays. Metaproterenol, ritodrine, fenoterol, and 8-hydroxy-5-[(1R)-1-hydroxy-2-[N-[(1R)-2-(ρ-methoxyphenyl)-1-methylethyl]aminojethyl]carbostyril (TA 2005) (3-100 nmol

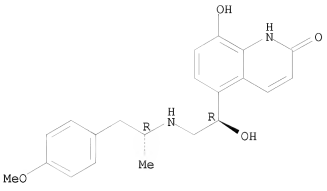
each) dose dependently relaxed the RbCC prepns. These relaxations were markedly reduced by Nω-nitro-L-arginine Me ester (L-NAME; 10 μM) and 1H-[1,2,4]-oxadiazolo-[4,3,-a]quinoxalin-1-one (ODQ) (10 μM), whereas the adenylyl cyclase inhibitor SQ 22,536 [9-(2-tetrahydrofuryl) adenine] (10 μM) had no effect. In contrast, neither L-NAME nor ODQ affected the isoproterenol-induced RbCC relaxations, but SQ 22,536 abolished this response. Sildenafil (1 μM) significantly potentiated the relaxations induced by β2-agonists without affecting the isoproterenol-evoked relaxations. Rolipram (10 μM) enhanced the relaxations elicited by isoproterenol but had no effect on those induced by the selective β2 agonists. Propranolol and (±)-1-[2,3-(dihydro-7-methyl-1H-inden-4-yl)oxy]-3-[(1-methylethyl)amino]-2-butanol hydrochloride (ICI 118,551) determined a rightward shift in the concentration-response curves to isoproterenol in a noncompetitive manner with a reduction of maximum response at the highest antagonist concentration,
with the slope values significantly different from unity. Propranolol and ICI 118,551 had no effect on the relaxations elicited by fenoterol, TA 2005, metaproterenol, and ritodrine. Atenolol and 1-[2-((3-carbamoyl-4-hydroxy)phenoxy)ethylamino]-3-[4-(1-methyl-4-trifluoromethyl-2-imidazolyl)-phenoxy]-2-propanol methanesulfonate (CGP 20712A) (0.1-10 μM) failed to affect the relaxations induced by all tested β-adrenoceptor agonists. The authors' study revealed the existence of two atypical β-adrenoceptors in the rabbit erectile tissue. Isoproterenol relaxes the rabbit cavernosal tissue by activating atypical β-adrenoceptors coupled to adenylyl cyclase pathway, whereas the selective β2-adrenoceptor agonists relax the RbCC tissue through another atypical β-adrenoceptor subtype coupled to nitric oxide release from the sinusoidal endothelium.

IT 137888-11-0, TA 2005
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(atypical β-adrenoceptor subtypes in mediation of relaxations of rabbit corpus cavernosum)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 140:315099 CA
TITLE: A combination of a long-acting β2-agonist and a glucocorticosteroid in the treatment of fibrotic diseases
INVENTOR(S): Trofast, Jan; Westergren-Thorsson, Gunilla
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004028545	A1	20040408	WO 2003-SE1486	20030924 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003263717	A1	20040419	AU 2003-263717	20030924 <--

PRIORITY APPLN. INFO.:			
	SE 2002-2837	A	20020925
	SE 2003-106	A	20030116
	WO 2003-SE1486	W	20030924

AB The invention discloses the use of glucocorticosteroids and long-acting

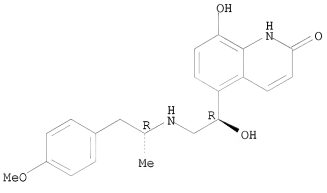
β2-agonists in the treatment of various fibrotic diseases, e.g. idiopathic pulmonary fibrosis, allergic alveolitis, and cystic fibrosis. The preferred combination of active substances consists of budesonide and formoterol fumarate dihydrate.

IT 137888-11-0, TA 2005
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(long-acting β2-agonist-glucocorticosteroid combination for treatment of fibrotic disease)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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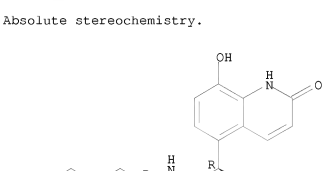
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 140:151959 CA
TITLE: Inhalation compositions containing buffers and anti-inflammatory agents
INVENTOR(S): Banerjee, Partha S.; Malladi, Ramana R.; Chaudry, Imtiaz A.
PATENT ASSIGNEE(S): Dey, L.P., USA
SOURCE: U.S. Pat. Appl. Publ., 15 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040023935	A1	20040205	US 2002-212573	20020802 <--

PRIORITY APPLN. INFO.: US 2002-212573 20020802
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB Bronchodilating concs. and diluted compns., methods of use thereof, and processes for making the concs. and diluted compns., are provided. The compns. are intended for administration as a nebulized aerosol. Methods for treatment, prevention, or amelioration of one or more symptoms of bronchoconstrictive disorders using the compns. provided herein are also provided. Thus, a composition contained Fluticasone propionate 150 μg/mL, TPGS 4, propylene glycol 1.67, glycerin 2, NaCl 0.1, and water 92.1% by weight, and buffer 2 mM.
IT 137888-11-0, TA-2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhalation compns. containing buffers and anti-inflammatory agents)
RN 137888-11-0 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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L11 ANSWER 19 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 139:255370 CA
TITLE: Synergistic combination
INVENTOR(S): Kilian, Ulrich; Schudt, Christian
PATENT ASSIGNEE(S): Altana Pharma A.-G., Germany
SOURCE: U.S., 29 pp., Cont.-in-part of U. S. Ser. No. 367,850.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6624181	B1	20030923	US 2002-49999	20020220 <--
WO 9837894	A1	19980903	WO 1998-EP1047	19980224 <--
W: AL, AU, BA, BG, BR, CA, CN, CZ, EE, GE, HU, ID, IL, JP, KR, LT,				

LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, US, VN, YU, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

US 6333354	B1	20011225	US 1999-367850	19990827	<--
WO 2001013953	A2	20010301	WO 2000-EP7852	20000811	<--
WO 2001013953	A3	20010920			

W: AE, AL, AU, BA, BG, BR, CA, CN, CZ, EE, GE, HR, HU, ID, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, US, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

EP 1671651	A1	20060621	EP 2006-110822	20000811	
EP 1671651	B1	20091111			

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

US 20040034087	A1	20040219	US 2003-437005	20030514	<--
US 7056936	B2	20060606			
US 20060079539	A1	20060413	US 2005-286391	20051125	
US 20060205806	A1	20060914	US 2006-433419	20060515	
JP 2009073853	A	20090409	JP 2008-290751	20081113	

PRIORITY APPLN. INFO.:

DE 1997-19708049	A	19970228
WO 1998-EP1047	W	19980224
EP 1999-116447	A	19990821
US 1999-367850	A2	19990827
WO 2000-EP7852	W	20000811
JP 1998-537294	A3	19980224
EP 2000-954625	A3	20000811
US 2002-49999	A1	20020220
US 2003-437005	A1	20030514
US 2005-286391	A1	20051125

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

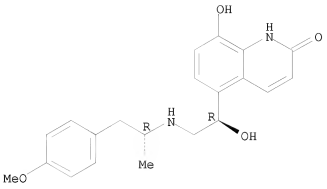
AB The invention relates to the combined administration of PDE inhibitors, such as roflumilast, and β2 adrenoceptor agonists for the treatment of respiratory tract disorders.

IT 137888-11-0, TA 2005
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(synergistic combination of PDE inhibitors and β2-adrenoceptor agonists for therapy of respiratory tract disorders)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 139:235447 CA
TITLE: Powder formulations for oral and nasal administration
INVENTOR(S): Trofast, Eva; Trofast, Jan
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003074036	A1	20030912	WO 2003-SE371	20030303 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003217110	A1	20030916	AU 2003-217110	20030303 <--
EP 1487423	A1	20041222	EP 2003-713142	20030303 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005519095	T	20050630	JP 2003-572556	20030303 <--
US 20050152847	A1	20050714	US 2004-506590	20040902 <--
PRIORITY APPLN. INFO.:			SE 2002-657 A	20020304

WO 2003-SE371 W 20030303

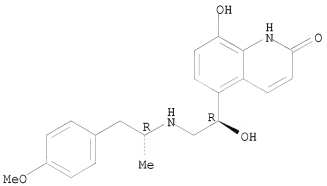
AB The present invention relates to specific excipients for powder formulations for oral and nasal inhalation. When the powder formulation is intended for oral or nasal inhalation the formulation should consist of primary particles of drugs (<10 μm) or agglomerates of such particles.

IT 137888-11-0, TA-2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(powder formulations for oral and nasal administration)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 42 CA COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 135:376803 CA

TITLE: Stable pharmaceutical solution formulations for pressurized metered dose inhalers

INVENTOR(S): Lewis, David; Ganderton, David; Meakin, Brian; Brambilla, Gaetano; Ferraris, Alessandra

PATENT ASSIGNEE(S): Chiesi Farmaceutici S.P.A., Italy

SOURCE: Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1157689	A1	20011128	EP 2001-112230	20010518 <--
EP 1157689	B1	20090107		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, CY, TR, AL, MK
CA 2411047 A1 20011129 CA 2000-2411047 20000522 <--
CA 2411047 C 20090804
WO 2001089480 A1 20011129 WO 2000-EP4635 20000522 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
BR 2000015884 A 20030708 BR 2000-15884 20000522 <--
HU 2003002007 A2 20030929 HU 2003-2007 20000522 <--
HU 2003002007 A3 20060728
JP 2003534266 T 20031118 JP 2001-585725 20000522 <--
EE 200200649 A 20040615 EE 2002-649 20000522 <--
EE 5167 B1 20090615
AU 2000250701 B2 20040701 AU 2000-250701 20000522 <--
CN 1213732 C 20050810 CN 2000-819564 20000522 <--
SK 286694 B6 20090305 SK 2002-1652 20000522
IL 152955 A 20100217 IL 2000-152955 20000522
EP 1466594 A2 20041013 EP 2004-11423 20010518 <--
EP 1466594 A3 20041201
EP 1466594 B1 20081203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
EP 1787639 A2 20070523 EP 2007-4772 20010518
EP 1787639 A3 20090225
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC,
NL, PT, SE, TR, AL, LT, LV, MK, RO, SI
AT 415945 T 20081215 AT 2004-11423 20010518
AT 419832 T 20090115 AT 2001-112230 20010518
PT 1466594 E 20090213 PT 2004-11423 20010518
PT 1157689 E 20090323 PT 2001-112230 20010518
ES 2318217 T3 20090501 ES 2004-11423 20010518
ES 2320194 T3 20090520 ES 2001-112230 20010518
TW 284047 B 20070721 TW 2001-90112202 20010522
BG 107256 A 20030630 BG 2002-107256 20021108 <--
MX 2002011414 A 20030606 MX 2002-11414 20021119 <--
NO 2002005568 A 20021120 NO 2002-5568 20021120 <--
HK 1058900 A1 20060127 HK 2004-101816 20040312
US 20090130026 A1 20090521 US 2008-255075 20081021
PRIORITY APPLN. INFO.: WO 2000-EP4635 A 20000522
EP 2001-112230 A3 20010518
WO 2007-EP3420 A1 20070419

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB An aerosol solution composition for use in an aerosol inhaler comprises an active material, a propellant containing a hydrofluoroalkane, a cosolvent and optionally a low volatility component to increase the mass median aerodynamic diameter (MMAD) of the aerosol particles on actuation of the inhaler. The active ingredient is a β2 agonist selected from salbutamol, formoterol, salmeterol, and TA-2005, salts thereof or their combination with steroid such as beclomethasone dipropionate, fluticasone propionate, budesonide, and its 22R-epimer or an anticholinergic

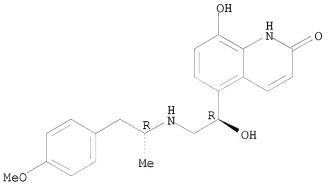
atropine-like derivative such as ipratropium bromide, oxitropium bromide, and tiotropium bromide. The composition is stabilized by using a small amount of mineral acid and a suitable can having part or all of its internal metallic surfaces made of stainless steel, anodized aluminum or lined with an inert organic coating.

IT 137888-11-0, TA-2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stable pharmaceutical aerosol solns. for pressurized metered dose inhalers)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 22 OF 42 CA COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 135:322746 CA

TITLE: Pharmaceutical formulations containing magnesium stearate and sugar for dry powder inhalers in the form of hard-pellets

INVENTOR(S): Staniforth, John Nicholas; Vodden Morton, David Alexander; Gill, Rajbir; Brambilla, Gaetano; Musa, Rossella; Ferrarini, Lorenzo

PATENT ASSIGNEE(S): Chiesi Farmaceutici S.p.A., Italy

SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2001078693	A2	20011025	WO 2001-EP4338	20010417 <--
WO 2001078693	A3	20020117		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2406119	A1	20011025	CA 2001-2406119	20010417 <--
CA 2406119	C	20090707		
GB 2363987	A	20020116	GB 2001-9431	20010417 <--
GB 2363988	A	20020116	GB 2001-9432	20010417 <--
EP 1274406	A2	20030115	EP 2001-931612	20010417 <--
EP 1274406	B1	20060913		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
HU 2003000593	A2	20030929	HU 2003-593	20010417 <--
HU 2003000593	A3	20060728		
BR 2001010301	A	20031230	BR 2001-10301	20010417 <--
EE 200200593	A	20040415	EE 2002-593	20010417 <--
EE 5257	B1	20100215		
SK 284248	B6	20041201	SK 2002-1491	20010417 <--
AT 339195	T	20061015	AT 2001-931612	20010417
EP 1719505	A2	20061108	EP 2006-17742	20010417
EP 1719505	A3	20070718		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AT 348603	T	20070115	AT 2001-921610	20010417
PT 1276472	E	20070228	PT 2001-921610	20010417
ES 2272473	T3	20070501	ES 2001-931612	20010417
ES 2275669	T3	20070616	ES 2001-921610	20010417
EP 1829533	A2	20070905	EP 2007-110708	20010417
EP 1829533	A3	20071031		
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, AL, BA, HR, MK, YU				
AT 377416	T	20071115	AT 2001-921625	20010417
ES 2292576	T3	20080316	ES 2001-921625	20010417
ZA 2002008066	A	20030805	ZA 2002-8066	20021008 <--
NO 2002004980	A	20021217	NO 2002-4980	20021016 <--
MX 2002010218	A	20030523	MX 2002-10218	20021016 <--
ZA 2002010225	A	20030618	ZA 2002-10225	20021218 <--
US 20030180227	A1	20030925	US 2003-257368	20030204 <--
US 6884794	B2	20050426		
US 20050201950	A1	20050915	US 2005-73625	20050308 <--
US 7223748	B2	20070529		

PRIORITY APPLN. INFO.:	GB 2000-9469	A	20000417
	EP 2000-113608	A	20000627
	EP 2001-921625	A3	20010417
	EP 2001-931612	A3	20010417
	WO 2001-EP4338	W	20010417
	US 2003-257368	A1	20030204

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention provides a formulation to be administered as dry powder for

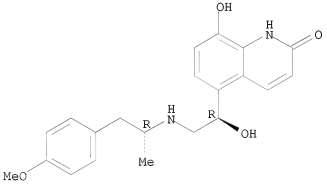
inhalation suitable for efficacious delivery of active ingredients into the low respiratory tract of patients suffering of pulmonary diseases such as asthma. In particular, the invention provides a formulation to be administered as dry powder for inhalation freely flowable, which can be produced in a simple way, phys. and chemical stable and able of delivering either accurate doses and high fine particle fraction of low strength active ingredients by using a high- or medium resistance device. For example, α-lactose monohydrate (particle size 50-400 μm) and Mg stearate (particle size 3-35 μm) were co-milled in a jet mill apparatus to obtain a blend A with a reduced particle size. Then 15% of this blend was mixed with 85% of α-lactose monohydrate (particle size 212-355 μm) to obtained a blend B. Micronized formoterol fumarate was added to the blend B and mixed to obtained a ratio of 12 μg of active to 20 mg of carrier; the amount of Mg stearate in the final formulation was 0.3% by weight The final formulation (hard pellet formulation) was loaded in a multidose dry powder inhaler. The formulation showed a good flow properties.

IT 137888-11-0, TA 2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of hard pellets for dry powder inhalers using magnesium stearate and sugar blends)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 23 OF 42 CA COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 135:262267 CA

TITLE: Preparation of pharmaceutical powder agglomerates

INVENTOR(S): Yang, Tsong-toh

PATENT ASSIGNEE(S): Schering Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 18 pp., Cont. of U.S. Ser. No. 42,973, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20010024641	A1	20010927	US 2001-824377	20010402 <--
US 6503537	B2	20030107		
US 20010051187	A1	20011213	US 2001-901205	20010709 <--
US 6495167	B2	20021217		
US 20030085480	A1	20030508	US 2002-238423	20020910 <--
US 20030157184	A1	20030821	US 2002-326327	20021219 <--
US 20040109828	A1	20040610	US 2003-725845	20031202 <--
US 20050123608	A1	20050609	US 2005-28788	20050104 <--
US 7387794	B2	20080617		
US 20080118566	A1	20080522	US 2007-947608	20071129
US 20080206346	A1	20080828	US 2008-117434	20080508

PRIORITY APPLN. INFO.:

US 1997-41055P	P	19970320
US 1998-42973	B1	19980317
US 2001-824377	A1	20010402
US 2001-901205	A1	20010709
US 2002-238423	B1	20020910
US 2002-326327	A1	20021219
US 2003-725845	B1	20031202
US 2005-28788	A3	20050104

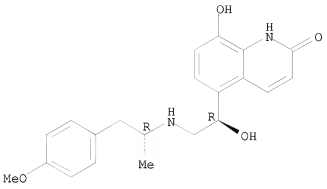
AB The invention relates to a method of producing an agglomerate of drug and solid binder. The process involves producing individual agglomerate particles and then converting the convertible amorphous content of same, following agglomeration, by the application of, e.g., moisture. Agglomerates capable of conversion as well as the finished agglomerates and oral and nasal dosing systems including same are also contemplated. The process produces agglomerates which are rugged but which will produce an acceptable fine particle fraction during dosing. Micronization of mometasone and lactose were carried out at 20% RH and 21°. The powders were blended and the bulk d. was determined

IT 137888-11-0, TA-2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of pharmaceutical powder agglomerates)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L11 ANSWER 24 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 133:276030 CA
TITLE: Stereoselectivity at the β2-adrenoceptor on macrophages is a major determinant of the anti-inflammatory effects of β2-agonists
AUTHOR(S): Izeboud, C. A.; Vermeulen, R. M.; Zwart, A.; Voss, H.-P.; Van Miert, A. S. J. P. A. M.; Witkamp, R. F.
CORPORATE SOURCE: Department of Pharmacology, TNO Pharma, Zeist, 3700 AJ, Neth.
SOURCE: Naunyn-Schmiedeberg's Archives of Pharmacology (2000), 362(2), 184-189
CODEN: NSAPCC; ISSN: 0028-1298
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

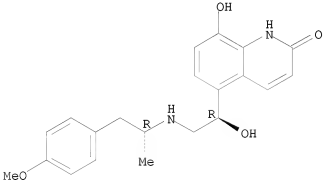
AB Previous research has shown that β-adrenoceptor (β-AR) agonists have potent anti-inflammatory capabilities, e.g. represented by suppression of release of the proinflammatory cytokines. Aim of this research was to determine whether the effects of β-agonists on LPS-induced TNFα and IL-10 release are influenced by their different stereochem. In addition, the role of the β-AR subtypes was studied. The effect of two stereoisomers of the selective β2-AR agonist TA2005 [(R,R)- and (S,S)-] on the LPS-induced TNFα and IL-10 release by U937 macrophages was compared. The (R,R)-stereoisomer was 277 times more potent in inhibiting the TNFα release than the (S,S)-form. The (R,R)-stereoisomer also appeared to be more potent in increasing the IL-10 release. In radioligand binding studies the affinity of (R,R)-TA2005 for the β-adrenoceptor was 755 times higher than the (S,S)-TA2005 stereoisomer. In addition, the elevation of intracellular cAMP in U937 cells appeared to be stereoselective: (R,R)-TA2005 was more potent in elevating intracellular cAMP. The effect of both stereoisomers on the LPS-induced TNFα release could almost completely be antagonized by preincubation with the selective β2-AR-antagonist ICI-118551. Further evidence that the effect of the β-agonists is mediated via the

β2-adrenoceptor subtype exclusively was acquired by incubation of U937 cells with selective β1- and β3-agonists. None of these receptor subtype agonists showed significant suppressive effect on TNFα release. This study provides addnl. proof that the anti-inflammatory effects of β2-agonists are mediated via the β2-adrenoceptor and indicates that these effects are highly dependent on the stereoselectivity of the ligand.

IT 137888-11-0, TA2005
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stereoselectivity at β2-adrenoceptor on macrophages is a major determinant of anti-inflammatory effects of β2-agonists in relation to suppression of release of proinflammatory cytokines)

RN 137888-11-0 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 132:185436 CA
TITLE: Inhalation formulations for β2-agonists and glucocorticosteroids
INVENTOR(S): Trofast, Jan
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.
SOURCE: U.S., 4 pp., Cont.-in-part of U.S. Ser. No. 316,938. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6030604	A	20000229	US 1998-4902	19980109 <--
US 6371171	B1	20020416	US 1994-316938	19941003 <--
US 6287540	B1	20010911	US 1999-431916	19991102 <--
IN 2000DE00744	A	20070309	IN 2000-DE744	20000821
PRIORITY APPLN. INFO.:			US 1994-316938	A2 19941003
			SE 1997-135	A 19970120
			SE 1993-3215	A 19931001
			SE 1993-4270	A 19931222
			IN 1998-DE48	A3 19980109
			US 1998-4902	A2 19980109

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

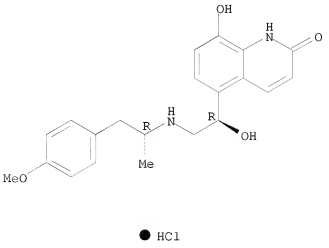
AB A dry powder composition comprising (a) one or more potent therapeutically active substances selected from the group consisting of glucocorticosteroids, β2-agonists, and prophylactic agents and (b) a carrier substance. The dry powder composition is in finely divided form with a poured bulk d. of 0.28-0.38 g/mL and is useful in the treatment of respiratory disorders, particularly asthma. For example, 5.2 parts of formoterol fumarate dihydrate and 896.8 parts of lactose monohydrate were mixed and micronized to obtain a particle size of <3 μm. Micronized budesonide (98 parts) was added and the mixture was remicronized. The powder was agglomerated, spheronized and sieved to give a powder with a bulk d. of 0.34 g/mL.

IT 137888-11-0, TA 2005
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(powder inhalant formulations containing β2-agonists and glucocorticosteroids for treatment of respiratory disorders)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 26 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 131:267366 CA
TITLE: Pharmacological evidence for β2-adrenoceptor in right atria from stressed female rats
AUTHOR(S): Spadari-Bratfisch, R. C.; Santos, I. N.; Vanderlei, L. C. M.; Marcondes, F. K.
CORPORATE SOURCE: Departamento de Fisiologia e Biofisica, Instituto de Biologia, Universidade Estadual de Campinas, Sao Paulo, 13081-970, Brazil
SOURCE: Canadian Journal of Physiology and Pharmacology (1999), 77(6), 432-440
CODEN: CJPPA3; ISSN: 0008-4212
PUBLISHER: National Research Council of Canada
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The purpose of the present study was to demonstrate a physiol. response to TA2005, a potent β2-adrenoceptor (β2-AR) selective agonist, in right atria isolated from stressed female rats under the influence of the estrus cycle. The authors obtained concentration-response curves to the agonist in the presence and in the absence of selective antagonists in right atria isolated from female rats submitted to three daily foot-shock sessions (30 min duration, 120 pulses of 1.0 mA, 1.0 s, applied at random intervals of 5-25 s) and sacrificed at estrus or diestrus. The authors' results showed that the pD2 values of TA2005 were not influenced by estrus cycle phase or foot-shock stress. However, in right atria from stressed rats sacrificed during diestrus, the concentration-response curve to TA2005 was biphasic, with a response being obtained at concns. of 0.1 nM, whereas during estrus no response was observed at doses lower than 3 nM. ICI118,551, a β2-AR antagonist, abolished the response to nanomolar concns. of TA2005 in right atria from stressed rats at diestrus, with no changes in agonist pD2 values in right atria from control rats (7.47±0.09, $p > 0.05$) but a 3-fold decrease in pD2 values of TA2005 in right atria from foot shock stressed rats (7.90±0.07, $p \leq 0.05$). Concentration-response curves to TA2005 in the presence of ICI118,551 were best fitted by a one-site model equation. The β1-AR antagonist, CGP20712A, shifted to the right only the second part of the concentration-response curves to the agonist, unmasking the putative β2-AR-mediated response to the agonist in tissues isolated from stressed rats at diestrus. Under this condition, concentration-response curves to the agonist were best fitted by a two-site model equation. PD2 and maximum response of TA2005 interaction with β1- and putative β2-adrenoceptor components were calculated Schild analyses gave a pKB value for CGP20712A that was typical for the interaction with β1-AR in each exptl. group. PKB values for ICI118,551 could not be obtained in stressed rats sacrificed at diestrus since Schild plot slopes were lower than 1.0. In right atria from control rats, ICI118,551 pKB values were similar to reported values for the interaction of the antagonist with β1-AR. These results confirm that a heterogeneous β-AR population mediating the chronotropic response to catecholamines can be demonstrated in right atria from foot shock stressed female rats

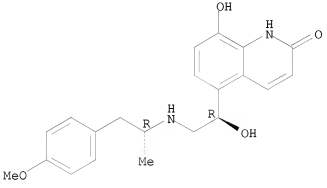
sacrificed at diestrus. The stress-induced response seems to be mediated by the β2-AR subtype. Right atria from rats sacrificed during estrus are protected against stress-induced alterations on the homogeneity of β-AR population.

IT 137888-11-0, TA2005
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(pharmacol. evidence for β2-adrenoceptor in right atria from stressed female rats during estrus and diestrus)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 27 OF 42 CA COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 131:106826 CA

TITLE: Pharmaceutical compositions comprising a compound having dopamine D2 receptor agonist activity and a compound having β2-adrenoreceptor agonist activity

INVENTOR(S): Dixon, John; Ince, Francis

PATENT ASSIGNEE(S): Astra Pharmaceuticals Ltd., UK; Astra Aktiebolag

SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9936095	A1	19990722	WO 1998-SE2427	19981222 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9920819	A	19990802	AU 1999-20819	19981222 <--
EP 1075278	A1	20010214	EP 1998-965344	19981222 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002509119	T	20020326	JP 2000-539868	19981222 <--
US 20020010197	A1	20020124	US 1999-254622	19990311 <--
PRIORITY APPLN. INFO.:			SE 1998-52 A	19980113
			SE 1998-330 A	19980205
			WO 1998-SE2427 W	19981222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

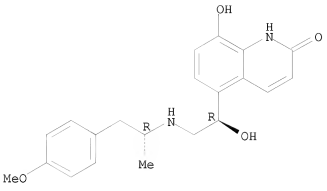
AB The present invention provides pharmaceutical compns. comprising a compound (A) having dopamine (D2) receptor agonist activity and a compound (B) having β2-adrenoreceptor agonist activity. Preferably the composition comprises, as compound (A), cabergoline or ropinirole and as compound (B), formoterol, (R,R)-formoterol, salmeterol, (R)-salmeterol, (R)-salbutamol or terbutaline. The composition is used in the treatment of reversible obstructive airway diseases.

IT 137888-11-0, TA-2005
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dopamine D2 receptor agonists and β2-adrenoreceptor agonists for treatment of reversible obstructive airway diseases)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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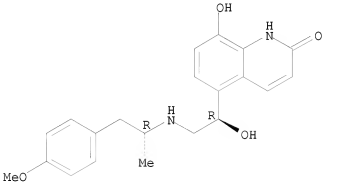
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 28 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 129:679 CA
ORIGINAL REFERENCE NO.: 129:175a
TITLE: Domains of β1 and β2 adrenergic receptors to bind subtype selective agonists
AUTHOR(S): Kurose, Hitoshi; Isogaya, Masafumi; Kikkawa, Hideo; Nagao, Taku
CORPORATE SOURCE: Laboratory of Pharmacology and Toxicology, Graduate School of Pharmaceutical Sciences, University of Tokyo, Tokyo, 113, Japan
SOURCE: Life Sciences (1998), 62(17/18), 1513-1517
CODEN: LIFSAK; ISSN: 0024-3205
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The authors studied the binding region of several β1 and β2 selective agonists by using chimeric β1 and β2ARs, and point-mutated β2 adrenergic receptors (ARs). By replacing a single transmembrane domain (TMD) of β1AR (or β2AR) with the corresponding region of β2AR (or β1AR), the authors found that β2 or β1 selectivities were determined by TMD2 and TMD7 of β2AR or by TMD2 of β1AR, resp. Alanine-substituted β2AR mutants showed that tyrosine at position 308 in TMD7 played an important role in binding of β2 selective agonists with high affinity. These data also suggested that the substituent on the amine portion was important for subtype selective agonist binding.
IT 137888-11-0, TA-2005
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(domains of β1 and β2 adrenergic receptors to bind subtype selective agonists)
RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 29 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 128:213077 CA
ORIGINAL REFERENCE NO.: 128:42057a,42060a
TITLE: The role of the seventh transmembrane region in high affinity binding of a β2-selective agonist TA-2005
AUTHOR(S): Kikkawa, Hideo; Isogaya, Masafumi; Nagao, Taku; Kurose, Hitoshi
CORPORATE SOURCE: Laboratory Pharmacology Toxicology, Graduate School Pharmaceutical Sciences, University Tokyo, Tokyo, 113, Japan
SOURCE: Molecular Pharmacology (1998), 53(1), 128-134
CODEN: MOPMA3; ISSN: 0026-895X
PUBLISHER: Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To determine the structural basis for binding subtype selective agonists in the β-adrenergic receptor (βAR), we examined the interaction of the mutant β2AR and chimeric β1/β2AR with a selective β2AR agonist, TA-2005 (8-hydroxy-5-[(1R)-1-hydroxy-2-[N-[(1R)-2-(p-methoxyphenyl)-1-methylethyl]amino]ethyl]carbostyril hydrochloride). The β2AR mutant with Ala substituted for Ser204 (S204A) significantly decreased the affinities for TA-2005, des-8-hydroxy-TA-2005 derivative (compound I), and isoproterenol. In contrast, a S207A mutation slightly decreased the affinities for TA-2005 and compound I, although the affinity for

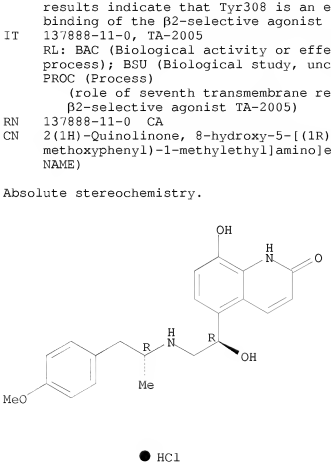
isoproterenol was decreased dramatically. The EC50 values of TA-2005 to activate adenylyl cyclase were not changed in either the S204A- or S207A-β2AR. In contrast with TA-2005, the EC50 values of compound I were reduced in the S204Aβ2AR but not in the S207A-β2AR. These results suggest that Ser204 is important for high affinity binding but not necessary to activate adenylyl cyclase. Although TA-2005 was highly selective at the β2AR, the compds. lacking p-methoxyphenyl-Et (compound II) or p-methoxyphenyl-methylethyl groups (compound III) on the amine portion of TA-2005 lost β2AR subtype selectivity. When the second and seventh transmembrane (TM) region but not the TM1 region of the β2AR were replaced with the corresponding regions of the β1AR, the affinities of the chimeras for TA-2005 decreased compared with those of the wild type β2AR. Furthermore, substitution of the TM7 region of the β1AR with the corresponding region of the β2AR significantly increased the affinities for TA-2005. The affinities for isoproterenol and compds. II and III were not affected in the chimeras. These data suggest that the TM7 region of the B2AR plays an important role in β2-selective agonist binding. To determine the specific amino acid which confers this high affinity binding of TA-2005 to the β2AR, an alanine-scanning mutagenesis approach was employed. All amino acids that were different from those of the β1AR were individually changed to alanine. One mutant receptor (Y308A-β2AR) out of 10 point-mutated β2ARs showed a dramatically reduced affinity for TA-2005. These results indicate that Tyr308 is an essential amino acid for high affinity binding of the β2-selective agonist TA-2005.

IT 137888-11-0, TA-2005
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(role of seventh transmembrane region in high affinity binding of a β2-selective agonist TA-2005)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



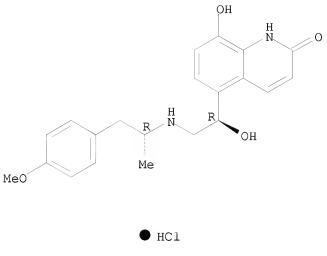
OS.CITING REF COUNT: 34 THERE ARE 34 CAPLUS RECORDS THAT CITE THIS RECORD (34 CITINGS)
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 30 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 128:84395 CA
ORIGINAL REFERENCE NO.: 128:16341a,16344a
TITLE: Treatment of inflammatory diseases with drugs containing carbostyril derivative
INVENTOR(S): Hoshiko, Kenichiro; Totsuka, Tetsuya; Nakamaru, Naoko; Hayashi, Shigehiro
PATENT ASSIGNEE(S): Novartis A. -G., Switz.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09309830	A	19971202	JP 1997-32307	19970217 <--
PRIORITY APPLN. INFO.:			GB 1996-3237 A	19960216

AB 8-Hydroxy-5-[(1R)-1-hydroxy-2-[N-[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]carbostyril (I) or its acid salts are used for drugs for prevention or treatment of inflammatory states, e.g. eosinophilia, allergy, asthma, dermatitis, rhinitis, etc. The drugs containing I or its salts may be in the forms of topical prepns., inhalants, transdermal prepns., or pernasal prepns. Inhalation of I-HCl prior to antigen challenge to ovalbumin-sensitized rats significantly suppressed eosinophil accumulation in lung.
IT 137888-11-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inflammation inhibitors containing carbostyril derivative for treatment of asthma)
RN 137888-11-0 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 31 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 127:171675 CA
ORIGINAL REFERENCE NO.: 127:33109a,33112a
TITLE: Differential contribution of two serine residues of wild type and constitutively active β2-adrenoceptors to the interaction with β2-selective agonists
AUTHOR(S): Kikkawa, Hideo; Kurose, Hitoshi; Isogaya, Masafumi; Sato, Yoji; Nagao, Taku
CORPORATE SOURCE: Department of Toxicology and Pharmacology, Faculty of Pharmaceutical Sciences, University of Tokyo, Tokyo, 113, Japan
SOURCE: British Journal of Pharmacology (1997), 121(6), 1059-1064
CODEN: BJPCBM; ISSN: 0007-1188
PUBLISHER: Stockton
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors have studied the difference in receptor binding activity between partial and full β2-adrenoceptor agonists and the abilities of the agonists to interact with Ser204 and Ser207 in the fifth transmembrane region of the β2-adrenoceptor, amino acid residues that are important for activation of the β2-adrenoceptor. In the binding study with [125I]-iodocyanopindolol, the Ki values of (±)-salbutamol, (±)-salmeterol, TA-2005 and (-)-isoprenaline for the β2-adrenoceptor expressed in COS-7 cell membranes were 3340, 21.0, 12.0 and 904 nM, resp. The β1/β2 selectively of these agonists was in the order of (±)-salmeterol (332-fold) > A-2005 (52.8) > (±)-salbutamol (6.8) > (-)-isoprenaline (1.1), and the β3-/β2-adrenoceptor selectivity of these agonists was in the order of TA-2005 (150-fold) > (±)-salmeterol (88.6) > (±)-salbutamol (10.4) > (-)-isoprenaline (3.2). The maximal activation of adenylyl cyclase by stimulation of the β1-, β2- and β3-adrenoceptors by TA-2005 was 32, 100 and 100% of that by (-)-isoprenaline, resp.,

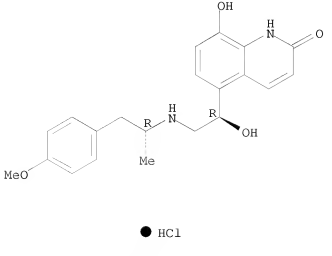
indicating that TA-2005 is a full agonist at the β2- and β3-adrenoceptors and a partial agonist at the β1-adrenoceptor. (±)-Salbutamol and (±)-salmeterol were partial agonists at both β1- (8%) and 9% of (-)-isoprenaline and β2- (83% and 74% of (-)-isoprenaline) adrenoceptors. The affinities of full agonists, TA-2005 and (-)-isoprenaline, were markedly decreased by substitution of Ala for Ser204 (S204A) of the β2-adrenoceptor, whereas this substitution slightly reduced the affinities of partial agonists, (±)-salbutamol and (±)-salmeterol. Although the affinities of full agonists for the S207A-β2-adrenoceptor were decrease, those of partial agonists for the S207A-β2-adrenoceptor were essentially the same as for the wild type receptor. The constitutively active mutant (L266S, L272A) of the β2-adrenoceptor had an increased affinity for all four agonists. The affinities of full agonists were decreased by substitution of Ser204 of the constitutively active mutant, whereas the degree of decrease was smaller than that caused by the substitution of the wild type receptor. Although the affinities of (±)-salbutamol and (±)-salmeterol for the S207A-β2-adrenoceptor were essentially the same as those for the wild type β2-adrenoceptor, the affinities of (±)-salbutamol and (±)-salmeterol for the constitutively active β2-adrenoceptor were decreased by substitution of Ser207. These results suggest that Ser204 and Ser207 of the wild type and constitutively active β2-adrenoceptors differentially interacted with β2-selective agonists.

IT 137888-11-0, TA-2005
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(differential contribution of two serine residues of wild type and constitutively active β2-adrenoceptors to the interaction with β2-selective agonists)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS

RECORD (20 CITINGS)
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

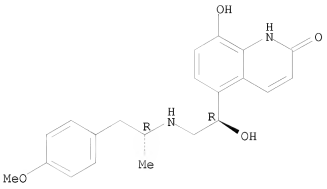
L11 ANSWER 32 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 126:366 CA
ORIGINAL REFERENCE NO.: 126:63a,66a
TITLE: Three-Dimensional Models for Agonist and Antagonist Complexes with β2 Adrenergic Receptor
AUTHOR(S): Kontoyianni, Maria; DeWeese, Carol; Penzotti, Julie E.; Lybrand, Terry P.
CORPORATE SOURCE: Center for Bioengineering, University of Washington, Seattle, WA, 98195-1750, USA
SOURCE: Journal of Medicinal Chemistry (1996), 39(22), 4406-4420
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Computer-modeling techniques have been used to generate docked complexes for a series of β adrenergic agonists and antagonists with a three-dimensional model of the β2 adrenergic receptor. For all ligands tested, it proved possible to dock low-energy conformers in the receptor model, with sensible electrostatic, steric, and hydrogen-bonding interactions, many of which are supported by exptl. studies of the β2 receptor. Our results illustrate the power of mol. modeling techniques, when coupled with appropriate exptl. methods and data, to investigate structure-function properties of integral membrane receptor proteins that cannot yet be studied by direct structural methods.

IT 137888-11-0, TA-2005
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(three-dimensional models for agonist and antagonist complexes with β2-adrenergic receptor)

RN 137888-11-0 CA
CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 26 THERE ARE 26 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)
REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 33 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 125:123754 CA
ORIGINAL REFERENCE NO.: 125:23033a
TITLE: Aerosol drug formulations containing hydrofluoralkane propellants and surfactants
INVENTOR(S): Baeckstroem, Kjell; Dahlbaeck, Magnus; Johansson, Ann; Kaellstrand, Goeran; Lindqvist, Elisabet
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9619198	A1	19960627	WO 1995-SE1542	19951219 <--
W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
ZA 9510754	A	19960624	ZA 1995-10754	19951218 <--
CA 2206782	A1	19960627	CA 1995-2206782	19951219 <--
CA 2206782	C	20070403		
AU 9643593	A	19960710	AU 1996-43593	19951219 <--
AU 702880	B2	19990311		
EP 806940	A1	19971119	EP 1995-942343	19951219 <--
EP 806940	B1	20030409		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV

CN 1170356	A	19980114	CN 1995-196953		19951219	<--
CN 1088580	C	20020807				
BR 9510510	A	19980707	BR 1995-10510		19951219	<--
HU 77775	A2	19980828	HU 1998-483		19951219	<--
CZ 288146	B6	20010516	CZ 1997-1947		19951219	<--
AT 236617	T	20030415	AT 1995-942343		19951219	<--
IL 116460	A	20031031	IL 1995-116460		19951219	<--
US 6932962	B1	20050823	US 1996-601005		19951219	<--
JP 4155594	B2	20080924	JP 1996-519732		19951219	
IN 1995DE02394	A	20050311	IN 1995-DE2394		19951222	<--
NO 9702681	A	19970611	NO 1997-2681		19970611	<--
NO 318229	B1	20050221				
FI 9702655	A	19970619	FI 1997-2655		19970619	<--
JP 2006124404	A	20060518	JP 2006-29673		20060207	
PRIORITY APPLN. INFO.:			SE 1994-4469	A	19941222	
			SE 1995-2452	A	19950706	
			JP 1996-519732	A3	19951219	
			WO 1995-SE1542	W	19951219	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

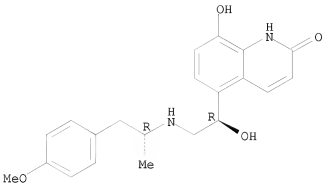
AB Aerosol formulations suitable for use in pressurized metered dose inhalers comprise a hydrofluoralkane propellant, a medicament for inhalation and a surfactant which is a C8-C16 fatty acid or salt thereof, a bile salt, a phospholipid, or an alkyl saccharide. Micronized formoterol fumarate and micronized Na taurocholate were added to a plastic-coated glass bottle. The bottle was chilled to -40° with a mixture of CO2 ice and isopropanol and then chilled 1,1,1,2-tetrafluoroethane was added. The bottle was sealed with a metering valve and treated in an ultrasonic bath for 10 min to give a good suspension.

IT 137888-11-0, TA-2005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aerosol drug formulations containing hydrofluoralkane propellants and surfactants)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



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OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 34 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 123:329213 CA
ORIGINAL REFERENCE NO.: 123:58733a,58736a
TITLE: Pharmacokinetic studies on the novel β2-adrenoceptor agonist TA-2005
AUTHOR(S): Yoshikawa, Masayoshi; Kikkwa, Hideo; Endo, Hiroshi; Togo, Youko; Takahashi, Masakatsu; Fujihara, Michio; Takaichi, Osasi
CORPORATE SOURCE: Research Laboratory of Drug Metabolism, Tanabe Seiyaku Co., Ltd., Toda, 335, Japan
SOURCE: Yakubutsu Dotai (1995), 10(4), 497-512
CODEN: YADOEL; ISSN: 0916-1139
PUBLISHER: Nippon Yakubutsu Dotai Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The absorption, distribution, metabolism and excretion of the β2-adrenoceptor agonist TA-2005 in rat, dog, and monkey were studied. The extent of absorption calculated from the ratio of urinary excretion after oral (0.3 mg/kg) and i.v. (0.1 mg/kg) was administration of 14C-TA-2005 was 16 and 24% of the dose in male and female rats, resp. In dogs, the absorption extent after oral administration (0.02 mg/kg) was above 60%, indicating a considerable species difference. The absorption extent from the ligated intestine of the rat was inhibited by the presence of bile. The Cmax of plasma radioactivity after oral administration (1 mg/kg) in the rat was only 6.4 ng eq./mL at 15 min. Tissue levels of radioactivity were high in the digestive tract and liver and low in other organs and tissues. In male rats, the urinary and fecal excretion ratios of radioactivity within three days after oral administration were 3.2 and 90.7% of the dose, resp., and those after i.v. administration were 20.3 and 75.7%, resp. The ratios in female rats were similar to the resp. ratios in male rats. In male dogs, the urinary and fecal excretion ratios during three days after oral administration (0.02 mg/kg) were 60.8 and

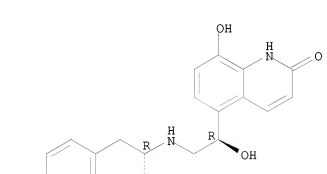
37.7%, resp. In male monkeys, the urinary and fecal excretion ratios during seven days after oral administration (0.3 mg/kg) were 14.3 and 79.5%, resp., and those after i.v. administration (0.1 mg/kg) were 60.0 and 34.4%, resp. In rats, the ratios of biliary excretion within 24 h after intraduodenal and i.v. administration were 55.2 and 81.5%, resp., indicating that the main excretion route in this species is the bile.

IT 137888-11-0, TA-2005
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(pharmacokinetic studies on novel β2-adrenoceptor agonist TA-2005)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L11 ANSWER 35 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 122:71730 CA
ORIGINAL REFERENCE NO.: 122:13419a,13422a
TITLE: TA-2005, a novel, long-acting, and selective β2-adrenoceptor agonist: characterization of its in vivo bronchodilating action in guinea pigs and cats in comparison with other β2-agonists
AUTHOR(S): Kikkawa, Hideo; Kanno, Kenkichi; Ikezawa, Katsuo
CORPORATE SOURCE: Pharmacol. Res. Lab., Tanabe Seiyaku Co., Ltd., Saitama, 335, Japan
SOURCE: Biological & Pharmaceutical Bulletin (1994), 17(8), 1047-52
CODEN: BPBLEO; ISSN: 0918-6158
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Relaxant effects of the β2-selective adrenoceptor agonist TA-2005 on bronchoconstriction in the anesthetized guinea pig and cat were evaluated in comparison with other known β2-adrenoceptor agonists. The ED50 values of i.v. administered TA-2005, procaterol, formoterol,

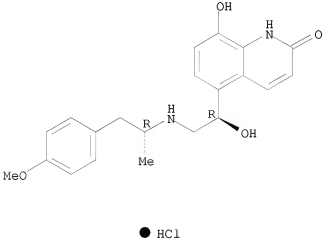
isoproterenol, salbutamol, and salmeterol to inhibit the histamine-induced bronchoconstriction of the guinea pigs were 0.024, 0.053, 0.056, 0.099, 0.23, and 2.00 μg/kg, resp., and those in serotonin-challenged cats were 0.019, 0.037, 0.039, 0.042, 0.13, and 0.52 μg/kg, resp., in the same increasing order. When guinea pigs were passively sensitized with anti-ovalbumin antiserum, the ED50 values of TA-2005, formoterol, procaterol, and isoproterenol to inhibit the antigen-induced bronchoconstriction were 0.09, 0.30, 0.65, and 7.0 μg/kg, i.v., resp., while those of TA-2005, procaterol, formoterol, and salbutamol in actively sensitized animals were 0.25, 0.25, 1.40, and 23.0 μg/kg. When TA-2005 was administered by inhalation to guinea pigs or by the intraduodenal route to cats, it exhibited a long-lasting inhibitory effect comparable or superior to the effects of salmeterol and formoterol. These data indicate that, among the known β2-adrenoceptor agonists examined, TA-2005 exerts the most potent bronchodilating effects with a long duration of action in vivo, and its potency ratios to the other reference drugs were greater in antigen- than spasmogen-induced bronchoconstriction models.

IT 137888-11-0, TA-2005
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bronchodilating action of β2-adrenergic agonist TA-2005 in comparison with other β2-agonists)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L11 ANSWER 36 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 121:271825 CA
ORIGINAL REFERENCE NO.: 121:49359a,49362a
TITLE: A functional beta-2 adrenoceptor-mediated chronotropic response in isolated guinea pig heart tissue:

selectivity of the potent beta-2 adrenoceptor agonist TA 2005

AUTHOR(S): Voss, Hans-Peter; Shukrula, Steven; Wu, Tin-Seng; Donnell, David; Bast, Aalt

CORPORATE SOURCE: Dep. Pharmacochem., Leiden/Amsterdam Cent. Drug Res., Amsterdam, Neth.

SOURCE: Journal of Pharmacology and Experimental Therapeutics (1994), 271(1), 386-9
CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: Williams & Wilkins

DOCUMENT TYPE: Journal

LANGUAGE: English

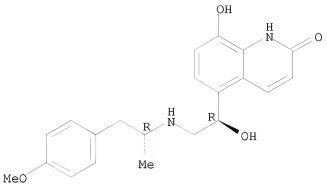
AB Responses were measured of the highly potent beta-2 adrenoceptor agonist TA 2005, a new bronchodilator, on isolated guinea pig right and left atria and papillary muscle. The main objectives of the study were to investigate the selectivity of the compound and to determine whether guinea pig isolated heart tissues could be used as a model for investigating mechanisms of clin. cardiac side effects. It was found that the inotropic responses in all tissues were mediated by the beta-1 adrenoceptor only. TA 2005 was a partial agonist for the inotropic response compared with l-isoprenaline. For the right atrial chronotropic response, however, TA 2005 exerted a biphasic effect and reached 84% of the l-isoprenaline response. The first phase was mediated by the beta-2 adrenoceptor, whereas the second phase was beta-1 adrenoceptor mediated. Approx. 64% of the TA 2005 chronotropic response was exerted via the beta-2 adrenoceptor. Addition of the beta-2-selective antagonist ICI 188.551 blocked the beta-2 adrenoceptor-mediated response, providing only a monophasic response. Addition of the beta-1-selective antagonist ICI 89.406 resulted in further separation of the phases. The finding that a beta-2-mediated chronotropic response exists on the right atrium of the guinea pig sheds new light on selectivity studies. It is suggested that quantification of beta-1/beta-2 selectivity of beta adrenoceptor agonists be performed not on the basis of measurement of guinea pig right atrial chronotropism but rather on the basis of measurement of guinea pig left atrial inotropism. On the other hand, because in human heart beta-2 adrenoceptors have a functional role, the guinea pig might be a suitable model for the examination of the cardiac side effects of bronchodilators. TA 2005 was found to be a beta-2-selective compound with a beta-2/beta-1 selectivity ratio of 256.

IT 137888-11-0, TA 2005
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(functional beta-2 adrenoceptor-mediated chronotropic response in isolated heart tissue: selectivity of potent beta-2 adrenoceptor agonist TA 2005)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L11 ANSWER 37 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 120:307515 CA
ORIGINAL REFERENCE NO.: 120:53949a,53952a
TITLE: Method for producing sustained-release microsphere preparation
INVENTOR(S): Kobayashi, Masao; Nishioka, Yukiko; Suzuki, Takehiko; Matsukawa, Yasuhisa
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: Can. Pat. Appl., 28 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2099941	A1	19940117	CA 1993-2099941	19930706 <--
CA 2099941	C	19991228		
JP 06032732	A	19940208	JP 1992-189181	19920716 <--
JP 2651320	B2	19970910		
US 5556642	A	19960917	US 1993-89194	19930712 <--
KR 211435	B1	19990802	KR 1993-13341	19930715 <--
EP 586838	A1	19940316	EP 1993-111455	19930716 <--
EP 586838	B1	19971105		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 159854	T	19971115	AT 1993-111455	19930716 <--
ES 2110544	T3	19980216	ES 1993-111455	19930716 <--

PRIORITY APPLN. INFO.: JP 1992-189181 A 19920716
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB A method is disclosed for producing a sustained-release microsphere preparation for a water-soluble medicament which has high incorporation efficiency of the medicament and low initial burst. The method comprises dissolving a water-soluble pharmaceutical active ingredient and a water-insol.

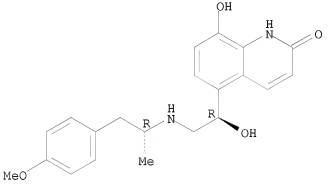
biodegradable polymer in 1-2 solvents in which both can dissolve, removing the solvent to give a solid dispersion having the water-soluble pharmaceutical active ingredient dispersed into the biodegradable polymer at a mol. level, and further, dissolving said solid dispersion in an organic solvent being water-immiscible and having a b.p. of <100°C, adding the resulting oil phase into an aqueous phase containing emulsifying agent to give an oil-in-water emulsion, and removing the organic solvent from the oil phase of the resulting emulsion. The methodol. was applied to preparation of sustained-release microspheres of TRH, a TRH derivative, etc.

IT 137888-11-0P
RL: PREP (Preparation)
(pharmaceutical sustained-release microsphere preparation of)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L11 ANSWER 38 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 118:219889 CA
ORIGINAL REFERENCE NO.: 118:37773a,37776a
TITLE: Topical preparations containing carbostyrils
INVENTOR(S): Kobayashi, Yukio; Oosawa, Takashi; Ikeda, Katsumi; Sugaya, Yosho; Harada, Mitsukuni
PATENT ASSIGNEE(S): Tanabe Seiyaku Co, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 05025045	A	19930202	JP 1991-271675	19910718 <--
PRIORITY APPLN. INFO.:			JP 1991-271675	19910718

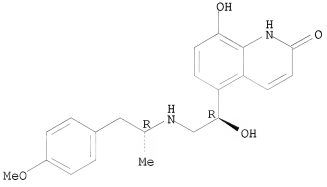
AB Topical prepns., useful for treatment of asthma, contain 8-hydroxy-5-[(1R)-1-hydroxy-2-[N-[(1R)-2-(p-methoxyphenyl)-1-methylethyl]amino]ethyl]carbostyril (I), 8-benzyloxy-5-[(1R)-1-hydroxy-2-[N-[(1R)-2-(p-methoxyphenyl)-1-methylethyl]amino]ethyl]carbostyril, or their pharmacol. acceptable salts as active ingredients. I-HCl 0.001, Tween-20 0.5, lauryl alc. 10, and propylene glycol to 100 g were mixed and the mixture (1 mL) was applied to the skin of rats to show 1702 μg I/cm2 permeation.

IT 137888-11-0
RL: BIOL (Biological study)
(topical prepns. containing, with good bioavailability)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 39 OF 42 CA COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER:	118:73458 CA
ORIGINAL REFERENCE NO.:	118:12687a,12690a
TITLE:	Atypical molecular pharmacology of a new long-acting β2-adrenoceptor agonist, TA 2005
AUTHOR(S):	Voss, Hans Peter; Donnell, David; Bast, Aalt
CORPORATE SOURCE:	Fac. Chem., Vrije Univ., Amsterdam, Neth.
SOURCE:	European Journal of Pharmacology, Molecular Pharmacology Section (1992), 227(4), 403-9 CODEN: EJPPET; ISSN: 0922-4106
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB The mol. pharmacol. of the putative long-acting bronchodilator TA-2005 was compared with that of the reference compds. isoprenaline and salbutamol in

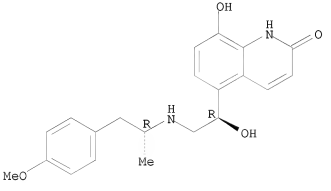
methacholine precontracted guinea pig tracheal smooth muscle relaxation and in bovine trapezium muscle binding expts. TA-2005 appeared very potent compared with isoprenaline and salbutamol (pD2 = 9.29 vs. 7.65 and 7.10 resp.). For isoprenaline and salbutamol a shallow displacement curve was observed, and the addition of the non-hydrolyzable GTP analog guanylylimidodiphosphate (GppNHp) gave a rightward shift (pKd,high and pKd,low values of 7.3 and 6.1 vs. 7.0 and 5.4, resp.). For TA-2005 a steep displacement curve was found with only one binding state even without GppNHp (pKd,high value of 8.2). The long duration of TA-2005 action might be explained by its tight binding to β2-adrenergic receptors. The extent of tight binding for TA-2005 was extremely large. The mol. basis of the tight agonist binding phenomenon for TA-2005 seems to be of different origin than for isoprenaline. A different mechanism of activation of β2-adrenoceptors may be involved for TA-2005.

IT 137888-11-0, TA-2005
RL: BIOL (Biological study)
(β2-adrenergic mol. pharmacol. of, as bromchodilator)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

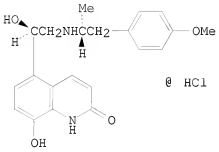


● HCl

OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L11 ANSWER 40 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 116:522 CA
ORIGINAL REFERENCE NO.: 116:95a,98a
TITLE: Tracheal relaxing effects and β2-selectivity of TA-2005, a newly developed bronchodilating agent, in isolated guinea pig tissues
AUTHOR(S): Kikkawa, Hideo; Naito, Kazuaki; Ikezawa, Katsuo
CORPORATE SOURCE: Biol. Res. Lab., Tanabe Seiyaku Co., Ltd., Toda, 335, Japan
SOURCE: Japanese Journal of Pharmacology (1991), 57(2), 175-85

CODEN: JJPAAZ; ISSN: 0021-5198
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

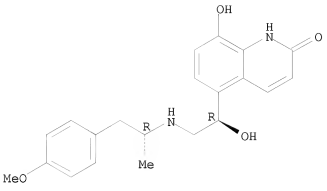
AB The tracheal relaxing effects and β2-selectivity of TA-2005 (I) were investigated by functional expts. and radioligand binding assay in guinea pigs in comparison with those of other β-agonists, isoproterenol, procaterol, formoterol and salbutamol. The relaxing activity of TA-2005 on histamine-induced contraction in the isolated trachea was most potent among the five agonists, and it was blocked by a β2-selective antagonist (ICI 118,551) but not by a β1-selective antagonist (bisoprolol). The potency of the relaxing effect was in the order of TA-2005 (pD2 = 9.79) > formoterol > procaterol > isoproterenol ≥ salbutamol. The pos. chronotropic effect of TA-2005 was similar to that of isoproterenol; and it was more potent than those of formoterol, procaterol and salbutamol in the isolated atria. The selectivity for tracheal muscle to atria of these agonists were in the order of procaterol ≥ formoterol > TA-2005 > salbutamol » isoproterenol. A radioligand binding experiment using guinea pig lung and cardiac ventricle as β2- and β1-adrenoceptor sources, resp., has also demonstrated that TA-2005 possesses extremely high affinity (IC50 = 1.04 nM) and selectivity (38-fold) to β2-adrenoceptors. By addition of GTP, the competition curve of [125I]iodocyanopindolol shifted rightward, indicating the agonist property. These results confirmed that TA-2005 is a highly β2-selective agonist that exerts a potent tracheal relaxing effect.

IT 137888-11-0, TA 2005
RL: BIOL (Biological study)
(trachea relaxation by, β2-adrenergic receptor stimulation in, heart rate response in relation to)

RN 137888-11-0 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1R)-1-hydroxy-2-[[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)

L11 ANSWER 41 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 104:88453 CA
ORIGINAL REFERENCE NO.: 104:14031a,14034a
TITLE: Carbostyril derivative
INVENTOR(S): Iwakuma, Takeo; Tsunashima, Akiro; Ikezawa, Katsuo; Takaiti, Osasi
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd. , Japan
SOURCE: Eur. Pat. Appl., 55 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

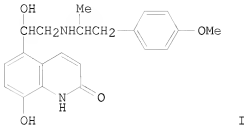
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
EP 147719	A2	19850710	EP 1984-115175	19841211	<--
EP 147719	A3	19860625			
EP 147719	B1	19890726			
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE					
AT 44954	T	19890815	AT 1984-115175	19841211	<--
JP 60208965	A	19851021	JP 1984-271603	19841221	<--
JP 04046950	B	19920731			
US 4579854	A	19860401	US 1984-684505	19841221	<--
CA 1258859	A1	19890829	CA 1984-470917	19841221	<--
JP 63054362	A	19880308	JP 1987-132886	19870528	<--
US 33024	E	19890815	US 1987-71741	19870709	<--
CA 1259074	A2	19890905	CA 1988-562864	19880329	<--

PRIORITY APPLN. INFO.:

GB 1983-34494	A	19831224
EP 1984-115175	A	19841211
CA 1984-470917	A3	19841221
US 1984-684505	A5	19841221

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 104:88453; MARPAT 104:88453

GI



I

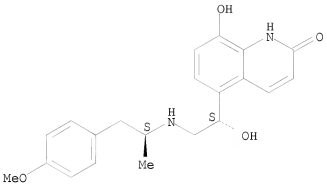
AB The title compound I (as its optical isomers) and its HCl salt, useful as bronchodilators, were prepared Thus, 5-acetyl-8-(benzyloxy)carbostyril was brominated with N-bromosuccinimide, the bromoacetyl derivative obtained was treated with 2-(p-methoxyphenyl)-1-methylamine, the mixture stirred at room temperature for 1.5 h to give the oxo derivative which was reduced with NaBH4 followed by treatment with EtOH-HCl to give 8-(benzyloxy)-5-[1-hydroxy-2-[N-[2-(p-methoxyphenyl)-1-methylethyl]amino]ethyl]carbostyril (mixture of α- and β-isomers). The α-isomer was N-acylated with (S)-1-(2-naphthylsulfonyl)pyrrolidine-2-carbonyl chloride to give (R)(R)(S)- and (S)(S)(S)-isomers. Removal of the protecting groups from the former resulted in 83% 8-(hydroxy-5-[(1R)-1-hydroxy-2-[N-[(1R)-2-(p-methoxyphenyl)-1-methylethyl]amino]ethyl]carbostyril-HCl (R,R-I-HCl) (II). II showed a potency ratio of 166:1 to isoproterenol in isolated tracheal muscle preparation to estimate bronchodilating activity according to Magnu's method.

IT 100331-97-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as bronchodilator)

RN 100331-97-3 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[(1S)-1-hydroxy-2-[[(1S)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]-, hydrochloride (1:2), rel- (CA INDEX NAME)

Relative stereochemistry.



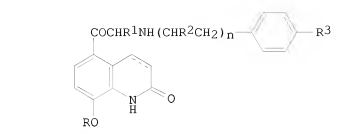
●2 HCl

OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

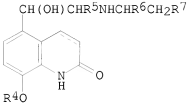
L11 ANSWER 42 OF 42 CA COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 88:6752 CA
ORIGINAL REFERENCE NO.: 88:1145a,1148a
TITLE: Carbostyril derivatives
INVENTOR(S): Yoshizaki, Shiro; Tamada, Shigeharu; Nakagawa, Kazuyuki
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52083379	A	19770712	JP 1975-157140	19751226 <--
JP 59013510	B	19840330		

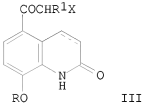
PRIORITY APPLN. INFO.: JP 1975-157140 A 19751226
GI



I



II



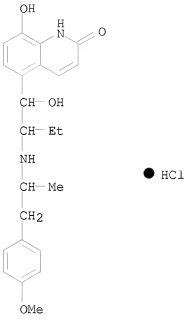
III

AB Four-5-(α-substituted aminoalkanoyl)carbostyril derivs. I (R = H, Me; R1 = H, alkyl; R2 = H, Me; R3 = H, Me, MeO; n = 0,1) and 4 5-[(2-substituted amino-1-hydroxy)alkyl]carbostyrils II (R4 = H, Me, PhCH2; R5 = H, alkyl; R6 = H, Me; R7 = PhO, Ph, 4-MeOC6H4) were prepared by reaction of III (X = halo) with H2N(CHR2CH2)nC6H4R3-4 followed by reduction if needed. I and II had β-sympathomimetic, anticonvulsant, antihypertensive, etc., activities. Thus, stirring 5 g 5-(α-bromopropionyl)-8-methoxy-3,4-dihydrocarbostyril with 20 g 4-MeOC6H4CH2CH2NH2 6 h at room temperature gave, after treatment with 47% HBr, 3.6 g 5-[α-(2-p-methoxyphenylethyl)aminopropionyl]-8-methoxy-3,4-dihydrocarbostyril-HBr (IV). Hydrogenation of 1.5 g IV, over Pd-black, gave 1.2 g 5-[[1-hydroxy-2-(2-p-methoxyphenylethyl)amino]propyl]-8-methoxy-3,4-dihydrocarbostyril-HBr.

IT 64749-99-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 64749-99-1 CA

CN 2(1H)-Quinolinone, 8-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]butyl]-, hydrochloride (1:1) (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

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(FILE 'HOME' ENTERED AT 10:55:17 ON 08 MAR 2010)

FILE 'REGISTRY' ENTERED AT 10:55:27 ON 08 MAR 2010
L1 STRUCTURE UPLOADED
L2 4 S L1 SAM
L3 39 S L1 FULL
L4 0 S L3 AND HCL
L5 9 S L3 AND SALT

FILE 'CA' ENTERED AT 10:58:17 ON 08 MAR 2010
L6 90 S L3
L7 11 S L6 AND CRYSTAL?
L8 8 S L6 AND MONOHYDROCHLORIDE
L9 79 S L6 NOT L7
L10 76 S L9 NOT L8
L11 42 S L10 AND PY<2006

=>

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

STN INTERNATIONAL LOGOFF AT 11:00:34 ON 08 MAR 2010